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The Decline of Capitalism

E.A. Preobrazhensky

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Routledge
Taylor & Francis Group
LONDON AND NEW YORK

First published 1985 by M.E. Sharpe

Reissued 2018 by Routledge
2 Park Square, Milton Park, Abingdon, Oxon 0X14 4RN
711 Third Avenue, New York, NY 10017, USA

Routledge is an imprint of the Taylor & Francis Group, an informa business

A Library of Congress record exists under LC control number: 84023592

ISBN 13: 978-0-873-32295-9 (hbk)
ISBN 13: 978-1-315-17903-2 (ebk)

Dedicated to Dot and Stan,
Owen, and the memory of Norma

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FOREWORD

Evgeny Preobrazhensky's book *The Decline of Capitalism* is one of the best works in Soviet economic theory. My own familiarity with the book resulted from my research for *The "Crisis" and the "Crash": Soviet Studies of the West, 1917–1929* (1981). I discovered that Preobrazhensky's study grew out of his analysis of the Soviet domestic economy (see E. A. Preobrazhensky, *The Crisis of Soviet Industrialization*, ed. Donald A. Filtzer, 1979) and at the same time addressed a whole new set of theoretical problems in a specifically capitalist context. While several works by Preobrazhensky remain unavailable in English, I chose to undertake a translation of *The Decline of Capitalism* as a work that would help English-language readers to appreciate the full extent of the man's theoretical creativity.

The Decline of Capitalism is a technical work in the sense that it develops Marx's schemes of expanded reproduction by incorporating the uneven (or cyclical) growth and replacement of fixed capital. Preobrazhensky assumes, for this purpose, that his readers will be "literate" in Marxism. I have therefore attempted to provide an introduction that will both deal with the technical issues and also situate *The Decline of Capitalism* in the history of Marxist political economy. I would hope and expect that the introduction will be a useful supplement to Preobrazhensky's own text. The note references, both in the introduction and in the annotated text, are to English-language sources wherever possible.

One of the major difficulties in preparing this translation of Preobrazhensky's work was the large number of typographical errors in the original Soviet edition, *Zakat Kapitalizma*, published in Moscow in 1931 by the state publishing house "Sotsekgiz." These errors were especially bothersome when they involved the tables and the numerical examples of reproduction. The problem was further compounded by

the fact that the tables rarely gave adequate or correct references to the original statistical sources. For his extraordinary resourcefulness in locating the original sources and recovering accurate data, I am very grateful to my research assistant, László Gyula Jobbágy. In addition, I wish to express my gratitude to Mary Pacy, June Wood, and particularly Brenda Samuels, who prepared the typescript in its final form.

Kearney, Ontario
July 1983

INTRODUCTION

In 1975 Progress Publishers (Moscow) issued an English-language edition of a book by the prominent Soviet economist S. Menshikov, with the title *The Economic Cycle: Postwar Developments*. Menshikov began his book by clarifying certain fundamental theoretical propositions. In particular he took care to repudiate the "underconsumptionist" interpretation of economic crises and to emphasize instead what Marx had called "disproportionalities." Marx had maintained that the rate of capital accumulation and investment is the "independent" variable upon which the level of wages and consumption is "dependent."[1] Menshikov agreed with Marx and commented that "explanation of crises in terms of underconsumption is wrong."[2]

Had Menshikov written this comment in the 1930s he undoubtedly would have been denounced for adopting a "bourgeois" theory of disproportionalities and for circulating "Trotskyist contraband." The official Stalinist interpretation of the Great Depression—or the "depression of a special kind," as it was then referred to—adhered strictly to the underconsumptionist viewpoint. Eugen Varga, who in Menshikov's words "took the classics of Marxism as his foundation and creatively applied their theory,"[3] in point of fact invented the notion of a "depression of a special kind," insisting that capitalism was afflicted with the fatal flaw of a chronically inadequate market. One of the few Soviet economists to condemn this dogma in the name of orthodox Marxism was Evgeny Preobrazhensky, author of *The Decline of Capitalism*, a close political associate of Leon Trotsky and the true originator of many of the ideas expounded by Menshikov.

Preobrazhensky, like Marx, believed that capitalism creates and destroys its own markets in the process of a developing dialectical contradiction. In *Capital* Marx had shown that the collapse of final demand during an economic crisis must be traced to an interruption in

This introduction is a substantially rewritten version of the first chapter of *The "Crisis" and the "Crash": Soviet Studies of the West* (London: NLB, 1981).

the process of reproducing capital. Capitalists created a market when they undertook new investments and increased wage expenditures; they destroyed the market when they cut back on investments and provoked a crisis of unemployment. The problem of markets was therefore a cyclical and derivative phenomenon, and it was the reproduction of fixed capital (plant and equipment) that constituted the "material basis" of periodic crises.[4] In *The Decline of Capitalism* Preobrazhensky referred the Stalinists back to Marx on this issue: "Taking the entire process of production and consumption as a whole, Marx quite correctly considered consumption in capitalist society to be a function of production."[5]

Besides their fundamental agreement in interpreting Marx, Menshikov and Preobrazhensky have more important interests in common. Preobrazhensky was the first Soviet economist to ask how the emergence of monopolistic capitalism might affect the pattern of the classical business cycle. Marx had seen the "law of value," or the price mechanism, spontaneously acting as an "external regulating force" over which competitive capitalists exercised no control.[6] Both Preobrazhensky and Menshikov pointed out that monopolists possess the ability to control price movements by deliberately altering the volume of production and the supply of particular commodities on the market.[7] The necessary consequence would be a change in the cyclical pattern of capitalist development.

During a traditional economic crisis final demand fell, market prices followed, and capitalists were compelled to reduce production costs in order to restore profitability. Although existing industrial equipment might be neither fully amortized nor physically worn out, the introduction of new technology was the alternative to bankruptcy. This compulsive renovation of fixed capital, in turn, became the basis of a cyclical recovery. Preobrazhensky opened up a whole new field for theoretical investigation when he discovered that monopolistic capitalism entailed not only price-maintenance policies, but also the practice of deliberately planning for a "reserve" of productive capacity. If the monopolists needed such a reserve to protect their privileged position against the threat of new competition, that same reserve would also create a serious obstacle in the way of new capital construction. To purchase new equipment in these conditions would require the voluntary infliction of huge capital losses—voluntary, because the competitive rivalry that previously enforced technological advance was now absent. By raising the possibility that monopoly capitalists might engage in some form of

planning, even at the risk of condemning the system as a whole to stagnation, Preobrazhensky provoked a howl of protest among his Soviet contemporaries. In their view monopolistic capitalism was incapable of any sort of planning whatsoever. To suggest otherwise was to betray a lack of faith in capitalism's falling victim to its own inherent "anarchy" of production.[8]

In 1975 Menshikov could develop these same ideas without fear of retribution. Monopolistic capitalism, he argued, had imposed a "special imprint" upon the investment process: "Each [corporation] plans its investment in such a way that at every given moment, even in the phase of [cyclical] advance, it should have reserve production capacities. . . . Such is the logic of monopolistic competition."[9] For Menshikov this planned creation of "reserve capacities" signified nothing other than the planned "overproduction of productive capital." Its result would be to forestall further investments, causing "the prolonged period of stagnation in investment, characteristic of contemporary capitalist reproduction."[10] Thus Menshikov explained that a considerable part of each modern cycle has come to be marked by "relative or even absolute stagnation."[11] In these circumstances the capitalist state must intervene first to sustain a period of economic expansion, and later, when full employment raises wages and jeopardizes profits, to precipitate a crisis with the aim of reducing wages. In the name of "wage restraint," incomes policies and deliberate deflation are applied, and "countercyclical regulation" gives way to its own opposite. The state eventually assumes the responsibility for "putting an end to the advance and tries to speed up the maturing of the crisis before the [wage] situation becomes uncontrollable. Acceleration by the government of a crisis is a typical phenomenon in conditions of the contemporary capitalist economy."[12] Preobrazhensky studied a similar phenomenon of "wage restraint," or distortion of the law of value in the labor market. The example with which he worked occurred in countries such as Italy and Germany. In the 1930s the practice of state intervention to lower wages and raise profits was known as *fascism*.

The fact that Preobrazhensky's approach has been implicitly rehabilitated by Menshikov testifies both to its continuing theoretical significance and to the absurdity of the vilification with which it was first greeted in the Soviet press. *The Decline of Capitalism* addresses the issues raised by the depression of the 1930s; its claim to modernity resides in the fact that it speaks no less directly to similar problems created by the depression of the late 1970s and early 1980s. Following

closely in the tradition of Marx's *Capital*, the book's most significant achievement is its reworking of Marx's models of capital accumulation, or the "reproduction schemes" as they are more generally known. The purpose of this introduction will be to acquaint the reader with Marx's analysis and to define the intellectual context in which Preobrazhensky was writing. Thus it will be possible not only to pinpoint the theoretical antecedents of *The Decline of Capitalism*, but also to illustrate the unique achievements of a work that can fairly be described as one of the best to appear in the Soviet Union during the first two decades of the revolution.

1. Marx on the Cyclical Pattern of Capitalist Development

With the concepts of "value" and "surplus value" Karl Marx endeavored to explain the laws of motion of capitalist society. Industrial workers, he maintained, sold their labor power to capitalists, receiving in exchange a wage sufficient to reproduce labor power in accordance with the prevailing level of subsistence. When the capitalist sold the commodities produced by the workers, he realized not only his costs of production, but profit as well. The secret of profit, or surplus value, was unpaid labor. If in a working day of twelve hours it took, let us say, eight hours for a worker to create sufficient value to cover the cost of wages, materials, and wear of equipment, then during the remaining four hours he would create surplus value. The attempt by capitalists to increase profit by raising the rate of exploitation (or the ratio of unpaid to paid labor) represented the dynamic force of change in capitalist society.

In competitive conditions every capitalist hoped to raise labor productivity, lower production costs, and secure an advantage over his rivals by introducing labor-saving technology. Some capitalists would respond successfully to the competitive challenge, others would fail and be absorbed by stronger enterprises. Existing capital would thus be centralized, and the accumulation of new capital would be concentrated in fewer but larger firms. The *law of the centralization and concentration of industrial capital* followed inevitably from competition.

Periodic waves of bankruptcy were normal in capitalist conditions

because the goal of production was profit, not the use of the commodities. The rationality of investment was measured neither by social utility nor by the use value of the commodities produced, but by its profitability, which depended upon exchange value and the price to be had in the market. The law of value compelled capitalists to maximize individual profits, but it also had the paradoxical effect of tending to lower the social average rate of profit, for only living labor could be exploited and made to yield surplus value. The *law of the falling rate of profit* operated through the progressive replacement of men by machines, or what Marx termed the "rising organic composition of capital."

Because living labor was the sole source of surplus value, a change in the wage rate critically affected production and investment decisions through its influence upon the rate of profit. A wave of investment presupposed an abundance of cheap labor, a "reserve army" of unemployed workers, who could be absorbed into production without disturbing the operation of existing firms. In *Capital* Marx described this reserve army as the result of a *law of population* peculiar to the capitalist mode of production, which caused labor periodically to become "relatively superfluous."[13]

Analyzing the operation of these laws, Marx showed that they become manifest through the capitalist economic cycle. The typical pattern of industrial development was "a decennial cycle (interrupted by smaller oscillations) of periods of average activity, production at high pressure, crisis, and stagnation."[14] The reserve army of labor was created, absorbed, and recreated by fluctuations in the level of investment and production. In the case of the law of the falling rate of profit Marx likewise saw cyclical fluctuations superimposed upon an underlying trend. This law, he commented, "acts only as a tendency. And it is only under certain circumstances and only after long periods that its effects become strikingly pronounced."[15] The fact that cyclically rising profit rates raised the level of industrial activity and the absorption of the unemployed meant that the *immediate* cause of industrial crises could not be found in mass underconsumption. On the contrary, Marx noted that "crises are always prepared by precisely a period in which wages rise generally, and the working class actually gets a larger share of that part of the annual product which is intended for consumption. From the point of view of . . . sound and 'simple' (!) common sense, such a period should rather remove the crisis."[16]

Marx's view of consumption has frequently been misinterpreted because of an apparent contradiction between volumes 2 and 3 of *Capital*. In Volume 3 it is said that the "final cause of all real crises always remains the poverty and restricted consumption of the masses."[17] In Volume 2 Marx wrote that it is "sheer tautology to say that crises are caused by the scarcity of effective consumption."[18] The underconsumptionist argument is clearly tautological in the sense that a "scarcity of effective consumption" is the *definition* of crises rather than an *explanation* of how they are caused. The point, however, is to explain *why* consumer demand is curtailed in the first place. In order to explain the movement of this "dependent" variable one must first account for changes in the "independent" variable of accumulation and investment.

Marx believed that one factor contributing to a decline of investment was a recurrent "disproportion between capital and exploitable labor power," or a potential investment demand that was so high, relative to supply conditions on the market, as to inflate wages at the expense of profits.[19] A second deterrent was relative overinvestment in one or more branches of industry. As a general proposition Marx believed that "the proportionality of the individual branches of production springs as a continual process from disproportionality."[20] During each cyclical recovery uncoordinated investments led to new disproportions that had to be corrected when the subsequent crisis eliminated a portion of the "redundant" capital. In Volume 2 of *Capital* Marx used the reproduction schemes to demonstrate both the preconditions for economic stability and the general sources of their disruption. Since Preobrazhensky developed and extended these schemes in a variety of ways, it will be useful to introduce them here.

Marx's first concern was to define the conditions of "simple reproduction," wherein the existing capital neither expanded nor contracted but was merely reproduced in the course of each year. The point of the analysis was to determine the necessary proportions between the different branches of industry. For purposes of simplification industry as a whole was divided into two "departments." Department I produced instruments of production and materials, Department II produced consumer goods. Capitalists and workers in Department I purchased consumer goods from Department II, and capitalists in Department II purchased constant capital—including machinery (fixed capital) and materials (circulating capital)—from Department I. The value of one year's output in the two departments was denoted by the following scheme:

$$\text{I. } c_1 + v_1 + s_1 = w_1$$
$$\text{II. } c_2 + v_2 + s_2 = w_2$$

In an exchange economy proportionality required a flow of equivalent values between the two departments. It was therefore necessary to establish what portion of the production of each department would remain within that department and what portion would be exchanged. Because Department I had to replace the machinery and materials used up during the year's production, one part of its output (c_1) would be retained for that purpose. Likewise part of II's output of consumer goods would be retained within that department: the capitalists in II would consume their surplus value (s_2), and their workers would spend their wages (v_2) on means of subsistence. Department II would therefore be left with a bundle of consumer goods equal in value to c_2, and these commodities would have to be sold in Department I in exchange for the equipment and materials needed by the consumer-goods industries in order to begin a second year of production. Department I, possessing an uncommitted balance of machinery and materials in the value of ($v_1 + s_1$), would then exchange these means of production against c_2 worth of consumer goods. In other words, workers in I would use their wages (v_1), and capitalists in I would use their surplus value (s_1) to purchase means of consumption. The material equivalent of these values, in the form of means of production, would pass into Department II in exchange for c_2 worth of consumer goods. The condition of equilibrium would then be given by the equation $c_2 = v_1 + s_1$. This balanced flow of values was essential if simple reproduction of the existing capital were to be maintained: "Such a balance would seem to be a law of reproduction on the same scale."[21]

Conversely, the reproduction schemes also demonstrated the consequence of any disproportionality. If Department II, for example, spent more on machinery and materials than it currently received from Department I in payment for consumer goods, several effects would follow: there would be a net addition to social purchasing power; prices would rise in Department I; further investments would be encouraged in heavy industry; and economic expansion would occur. As for the opposite case, Marx commented that it "needs no further discussion. . . . There would be a crisis—a crisis in production—in spite of reproduction on an unchanging scale."[22] Having produced means of production for the purpose of sale and profit, Department I would find itself with unsold inventories and would scale down both production and investments. A diminished scale of activity in I would in turn

create unsold inventories in II, and the crisis would spread from one department into the other.

Marx believed such disruptions in the flow of social purchasing power were inevitable in capitalist society. The reasons for this belief were not obvious in the reproduction schemes, for they assumed that the productive lifetime of fixed capital was invariably one year. Loosening this initial assumption, Marx suggested that in fact the average period of service would be ten (or twelve) years. This meant that c_1 and c_2 would represent (in addition to annually used up materials and fuel) only one-tenth (or one-twelfth) of the value of the total fixed capital employed in production. In other words, c_1 and c_2 would include one year of fixed-capital depreciation in each department. So long as the capitalists in II actually replaced one-tenth of their fixed capital each year, it would seem that the condition of proportionality might still be maintained. The problem was that there could be no guarantee, or even any presumption, that one-tenth of II's fixed capital would actually come up for physical replacement at the end of each year. Indeed, there was every reason to suppose this would not be the case, for these elements of capital would be invested at different times and be of different durability. Marx discussed this problem in *Theories of Surplus Value*:

> A portion of the constant capital which is calculated to be used up each year, and enters as wear and tear into the value of the product, is in fact *not* used up. Take for example a machine which lasts twelve years and costs £12,000, which makes the average depreciation to be written off each year £1,000. At the end of the twelve years, as £1,000 has entered each year into the product, the value of £12,000 has been reproduced, and a new machine of the same kind can be bought for this price. . . . Reality, however, is in fact different from that method of average accounting. In the second year the machine may run better than in the first. And yet after twelve years it is no longer usable. It is the same as with a cow, whose average life is ten years, but which does not for that reason die by a tenth each year, although at the end of the ten years it must be replaced. . . .[23]

The fact that fixed capital lasted more than one year meant that in any given year there might be a surge of demand for new equipment, which might be totally unanticipated in Department I. The funds that the capitalists had been setting aside in their depreciation account, or their "accumulation fund," could be spent either in whole or in part on new means of production. An unexpected growth of demand for new

fixed capital would generate a "boom"; a sudden decline of demand would precipitate a crisis. In order to compensate for this unpredictability of fixed-capital expenditures a continuous policy of *relative overproduction* would be required in anticipation of any contingency.

> Once the capitalist form of production is abolished, it is only a matter of the volume of the expiring portion . . . of fixed capital . . . varying in various successive years. If it is very large in a certain year . . . then it is certainly so much smaller in the next year. . . . Hence the aggregate production of means of production would have to increase in the one case and decrease in the other. This can be remedied only by a continuous relative overproduction. There must be on hand a certain quantity of fixed capital produced in excess of that which is directly required; on the other hand, and particularly, there must be a supply of raw materials etc., in excess of the direct annual requirements (this applies especially to means of subsistence). This sort of overproduction is tantamount to control by society over the material means of its own reproduction. But within capitalist society it is an element of anarchy.[24]

Overproduction would be an element of anarchy in capitalist society for a very simple reason: inventories do not earn a profit, and capitalist production is production governed by the immediate quest for profit. Assuming no inventories of freely disposable fixed capital, any increase of demand for industrial equipment must provoke a wave of investment in Department I. This would be the typical case following a cyclical economic crisis. Workers would first be thrown into the streets, consumer incomes would fall, prices for consumer goods would follow, and the capitalists in Department II would be forced to renovate their factories in order to reduce costs of production. "Such premature renewals of factory equipment on a rather large social scale are mainly enforced by catastrophes or crises."[25] The growing demand for fixed capital would bid up the price; profit rates in I would rise; and new capital would flow into industries producing means of production. The very attempt to satisfy this new demand, however, would ultimately create unplanned inventories unless the economic expansion were to continue without interruption. Marx explained this complication in *Theories of Surplus Value* by referring to the example of a single machine builder:

> . . . in a certain year the machine builder starts his production. He supplies machinery to the value of £12,000 during the year. Then in each of

> the eleven following years, for the simple reproduction of the machinery produced by him [in the first year] he would only have to produce to the value of £1,000; and even this annual production would not be annually consumed [if the lifetime of the equipment produced in the first year were twelve years]. Even less would his production be consumed if he employs his own capital [to the full]. In order that this capital should continue in motion and merely reproduce itself continuously each year, a continuous new extension of the industry which uses these machines is required. Here, therefore, even *if in this sphere of production the capital invested in it is only reproduced*, continuous accumulation in the other spheres of production is necessary. . . . Here in one sphere of production is a constant supply of commodities for accumulation, for new, additional industrial consumption in other spheres, even if in this sphere the existing capital is merely reproduced.[26]

Having expanded his production capacity, the machine builder would continue to employ his new capital only if user industries continued to install new machinery in order to expand their own capacity. Assuming the machine builder will not plan to accumulate an unsold inventory, any change of investment intentions on the part of his customers would spell the redundancy of his new capital. As Marx saw it, such redundancy was inevitable. As new workers streamed into employment, demand for consumer goods would grow rapidly during the first phase of a cyclical recovery. Until the reserve army neared depletion, prices and profits would continue to rise. However, with the approach of full employment, growth of consumer demand would slow and II's investment prospects would dim. Wage rates would be higher than at any previous stage of the expansion; the share of depreciation costs in current revenues would grow burdensome due to earlier equipment purchases; and there would now be a threat to the rate of profit. From the standpoint of individual capitalists in II, the decision not to invest further might be of no immediate consequence. The value of currently used-up fixed capital, plus any newly accumulated money capital, need only be preserved through deposit in a bank account. The bank might then use the deposit to finance commercial speculation elsewhere. But in Department I the crisis would erupt in the form of a disproportion between I's production capacity and II's demand for new means of production. "It becomes visible," Marx wrote, "not in the direct decrease of consumer demand, the demand for individual consumption, but in the . . . reproductive process of capital."[27] The "final cause" of the crisis would be the spread of unemployment and the

general contraction of consumer demand; its "material basis" would be the uneven reproduction of fixed capital and the resulting disproportionality between the two basic departments of capitalist production.

These examples of interdepartmental disproportionality provided a general illustration of the particular disproportionalities that might occur between any two branches of industry throughout the entire chain of production. In every case they were attributed to the sporadic and uneven process of reproducing and expanding fixed capital. Once the first capitalist crisis occurred, the pattern would repeat itself indefinitely due to the lack of coordinated, long-term planning of both investment and production: "As the heavenly bodies, once thrown into a certain definite motion, always repeat this, so it is with social production as soon as it is once thrown into this movement of alternate expansion and contraction. Effects, in their turn, become causes, and the varying accidents of the whole process, which always reproduces its own conditions, take on the form of periodicity."[28]

The question posed by Preobrazhensky in *The Decline of Capitalism* was this: would the cycle in fact recur forever in the same pattern if the organizational framework of capitalism were to change? Marx's analysis presupposed a highly competitive economy autonomously regulated by the law of value. But this same regulator brought about the centralization and concentration of capital, which in turn meant the centralization of investment activity. If a monopolist wished to safeguard his control of the market during a cyclical expansion, he would in fact have to possess a planned "reserve" of production capacity in order to thwart the entry of new firms. During a cyclical crisis the monopolist would endeavor at any cost to stabilize falling prices in order to prevent premature devaluation of his considerable investment. If neither the beginning of a recovery nor the onset of a crisis automatically ensured a growth of investments, then, as Preobrazhensky argued, the "material basis" of the traditional cycle might become irrelevant. In place of its earlier compulsive growth, capitalism might now tend in the direction of stability, "simple reproduction," or long-run stagnation. Each crisis would then be more difficult to overcome, for the capitalist system as a whole would be deprived of its spontaneous mechanism of recovery.

Marx's analysis logically anticipated this possibility, although he did not believe it would come to pass. For him capitalism was a manifestly irrational system, in which "social rationality asserts itself only *post*

festum," restoring fleeting moments of postcrisis proportionality by forcibly liquidating "redundant" capital.[29] The objective limit to the growth of capitalist production was therefore capital itself, in the sense that each renewal of investment required the prior destruction of a part of the existing capital. Proportionality was restored in the turmoil of a crisis; the ensuing expansion recreated disproportionality; and the next crisis would again prematurely eliminate a portion of the existing capital. The capitalist mode of production, in consequence, came increasingly to represent a "fetter" upon development of society's productive forces—and did so at the very same time as the labor process moved toward "socialization" within huge, centralized factories. Marx did not believe the working class, the victims of "misery, oppression, slavery, degradation, [and] exploitation," would permit these contradictions to reach their logical extreme of "pure" monopolism. He concluded: "The centralization of the means of production and the socialization of labor reach a point at which they become incompatible with their capitalist integument. This integument is burst asunder. The knell of capitalist private property sounds. The expropriators are expropriated."[30]

2. "Third Parties" and Imperialism

Karl Marx died in 1883, leaving his literary legacy in the hands of Friedrich Engels. As the first Marxist to apply the logic of *Capital* to a later stage of industrial organization, Engels helped to create many of the interpretive problems that Preobrazhensky would later attempt to unravel. Engels was particularly impressed by the pattern of industrial development in Germany, where the high cost of modern technology dictated a high degree of industrial concentration. Studying the German example, Engels gradually shifted the focus of Marx's reasoning. In his view the productive forces of modern capitalism were beginning to "outgrow the control of the laws of the capitalist mode of commodity exchange." Two factors were held responsible for this trend: "the new and general mania for a protective tariff" and the associated growth of trusts, "which regulate production, and thus prices and profits."[31] Erecting obstacles to new domestic competition, trusts and cartels encouraged the export of otherwise "surplus" capital and thereby minimized the threat of "local overspeculation." It now

appeared that "most of the old breeding-grounds of crises and opportunities for their development have been eliminated or strongly reduced."[32] As Engels summarized: "The acute form of the periodic process, with its former ten-year cycle, appears to have given way to a more chronic, long drawn out alternation between a relatively short and slight business improvement and a relatively long, indecisive depression—taking place in the various industrial countries at different times."[33]

By discounting the probability of recurrent cycles of the old style Engels initiated a fundamental reorientation of Marxist thought, which was now to be inflected towards the new theory of imperialism. With modern transportation and communications, the arena of capitalist instability appeared no longer to be the nation state, but the world economy as a whole. Other countries, having industrialized, were challenging British control of the export trade and creating the conditions for "the ultimate general industrial war, which shall decide who has supremacy on the world market. Thus every factor which works against a repetition of the old crises carries within itself the germ of a far more powerful future crisis."[34] Where Engels spoke of an "industrial war," other Marxists were to substitute "imperialist war."

Marx had considered the role of foreign markets when explaining the law of the falling rate of profit. This tendency, he maintained, might be temporarily offset if capital were to be invested in more lucrative ventures overseas and if low-cost food and materials were imported.[35] But Marx ascribed subordinate importance to these factors. His analysis of the cycle concentrated on the "material basis" of economic fluctuations, and when he developed his reproduction schemes he explicitly abstracted from foreign trade and investment. For Marx there was no doubt of the theoretical—as opposed to practical—possibility of realizing the entire value of the social product within a self-contained capitalist economy. In expanded as in simple reproduction it was necessary only that proportionality be maintained within and between the two departments. Engels departed from this approach for a reason Marx would hve considered theoretically erroneous. According to Engels, the expansion of capitalism into new lands resulted from *chronic* overproduction. A clear portent of underconsumptionist theories of imperialism can be seen in this comment by Engels: "The daily growing speed with which production may be enlarged in all fields of large-scale industry today is offset by the ever-greater slowness with which

the market for these increased products expands. What the former turns out in months can scarcely be absorbed by the latter in years. Add to this the protective tariff policy. . . . The results are general chronic overproduction, depressed prices, falling and even wholly disappearing profits. . . ."[36]

Sanctioned by the authority of Engels, the idea of chronic overproduction soon became a prevalent theme in later Marxist writings, culminating in the work of Rosa Luxemburg. The intermediate position between Engels and Luxemburg was assumed by Karl Kautsky, "official" theorist of the German Social Democratic Party. In Kautsky's view effective demand on the part of workers and capitalists could never absorb the output of capitalist industry: "Demand from the side of the capitalists and the workers whom they exploit is insufficient to absorb the means of consumption created by large-scale capitalist industry. The latter must search for an additional market beyond the limits of capitalism—in regions that do not yet produce in a capitalist manner."[37] Understanding that *chronic* underconsumption could not logically yield a theory of *cyclical* crises, Kautsky revised Marx's analysis of business cycles. He replaced the uneven reproduction of fixed capital with the fortuitous discovery and subsequent exhaustion of new markets. Prosperity, he asserted, depended upon fresh sources of demand, but "every epoch of prosperity, which accompanies every important expansion of the market, is condemned in advance to be short-lived, and a crisis is its natural culmination."[38] Impending exhaustion of the world market pointed to the inevitability of chronic industrial depression. In 1907 Kautsky wrote the following:

> Production is increasingly finding its limit in the market. If the capitalist mode of production exceptionally raises productivity with regard to mass products, it simultaneously reduces to a minimum the mass consumption of the workers who produce these products; that is, it produces an increasing surplus of mass consumption goods that must be sold outside the working class. A market for this surplus is created primarily by the destruction of primitive rural domestic industry and handicrafts—first in the home country and then in other countries. But this kind of market expansion takes place much more slowly than the expansion of industry. The latter, from time to time, encounters ever-newer obstacles.[39]

In the writings of Engels and Kautsky one finds the antecedents to Rosa Luxemburg's famous thesis that the accumulation of capital is impossible without "third-party," or noncapitalist markets. In *The*

Accumulation of Capital (1913) Luxemburg argued that Marx's reproduction schemes had misrepresented the accumulation process. The decisive flaw of *Capital* was that it "cannot explain the actual and historical process of accumulation."[40] Only in noncapitalist markets was it possible to realize the surplus value which the capitalists must accumulate for purposes of expanded reproduction. "Realization of the surplus value," claimed Luxemburg, " . . . requires as its prime condition . . . that there should be strata of buyers outside capitalist society. Buyers, it should be noted, not consumers, since the material form of the surplus value is quite irrelevant to its realization. The decisive fact is that the surplus value cannot be realized by sale either to workers or to capitalists, but only if it is sold to such social organizations or strata whose own mode of production is not capitalistic."[41]

In Volume 2 of *Capital* Marx had ignored the role of "third parties," assuming all incomes to derive either directly or indirectly from the capitalist production of commodities. The schemes of expanded reproduction demonstrated how economic growth would occur in these circumstances. Revising the earlier scheme of simple reproduction, Marx arranged the value components of the total social product in the following manner:

$$\begin{aligned} \text{I.}\ & c_1 + v_1 + s_{1c} + s_{1a} = w_1 \\ \text{II.}\ & c_2 + v_2 + s_{2c} + s_{2a} = w_2 \end{aligned}$$

Here the surplus value, previously consumed in its entirety by the capitalists, has been divided into a consumed portion (s_{1c}) and a portion that is accumulated for reinvestment (s_{1a}). A similar division occurs in Department II. In each department the capitalists will spend part of their accumulated surplus to add to their constant capital, the other part to add to their variable capital, or wages advanced to new workers. Department I will add $s_{1a'}$ to its constant capital and $s_{1a''}$ to its variable capital. Similarly Department II will add $s_{2a'}$ to constant capital and $s_{2a''}$ to variable capital. In order for expanded reproduction to take place, one condition is needed: as in the case of simple reproduction, Department II's demand for constant capital must equal Department I's demand for consumer goods. Whereas in simple reproduction that condition was expressed in the equation $c_2 = v_1 + s_1$, in the present case the corresponding equation would be $c_2 + s_{2a'} = v_1 + s_{1a''} + s_{1c}$.

But at this point Rosa Luxemburg protested. The *abstract condition* for expanded reproduction, she urged, must not be taken as a *guarantee*

of expanded reproduction. The capitalists would clearly have no difficulty in disposing of that part of production needed to replace plant, materials, and machinery. The workers could also be relied upon to spend their wages in exchange for means of subsistence. But Luxemburg saw no clear indication in Marx's schemes as to who would purchase the commodities embodying surplus value. Were the capitalists themselves to purchase these commodities, it seemed they would have no incentive to embark upon expanded reproduction in the first place. The exchanges would all be financed, *ex hypothesi*, from the capitalists' own pockets. Could this be *capitalist* production, or production for profit, or was it not merely production for its own sake? "If the capitalists as a class," argued Luxemburg, "are the only customers for the total amount of commodities, apart from the share they have to part with to maintain the workers—if they must always buy the commodities with their own money, and realize the surplus value, then amassing profit, accumulation for the capitalist class, cannot possibly take place."[42] Marx's exposition appeared to end up "running in circles."[43]

Rosa Luxemburg believed capital's "aim and goal in life" was "profit in the form of money and accumulation of money capital."[44] The problem with her critique of Marx was that she considered accumulation from the standpoint of the capitalist class, rather than that of individual capitalists, and assumed that all capitalists would be accumulating simultaneously. In *Capital* Marx had shown that normally some elements of fixed capital would be in the process of depreciation while others were being physically replaced. Thus some capitalists would be spending their monetary hoard while others would be accumulating money capital.[45] In order to ensure the expanding flow of purchasing power needed to realize surplus value all that was needed was that dishoarding (investment) exceed hoarding (saving).

Should any individual capitalist be desirous of making a purchase that exceeded his available money capital, he would, as Marx pointed out, simply borrow the difference. Those capitalists who were not yet prepared to spend their accumulation fund would not permit it to lie idle. Surplus value, wrote Marx, is "absolutely unproductive in its chrysalis stage of money. . . . It is a dead weight of capitalist production."[46] Funds would move therefore from those capitalists with no immediate need to those intent upon expanding their operations, the relation between the two groups being mediated by the banks and the rate of interest.

But at this point a further complication might arise. In Chapter XXV of *The Accumulation of Capital* Luxemburg noted that Marx's scheme left out provision for increases of labor productivity by way of raising the organic composition of capital. Technological advance would cause the displacement of living labor by machines, indicating the probability of a shortage of means of production and a surfeit of means of consumption. Were the capitalists in Department I to make good the deficit by consuming less of their surplus value, the necessary consequence would be to reduce their purchases of consumer goods and to disrupt the transfer of means of production into Department II. As Luxemburg commented: "The assumption of accelerated accumulation in Department I would then have to be supplemented by that of retarded accumulation in Department II, technical progress in one department by regression in the other."[47]

The only conceivable solution—apart from recourse to "third-party" markets—appeared to be for the capitalists in Department II to alleviate the deficit in I by transferring a part of their own surplus value as a loan. But Luxemburg believed that option was foreclosed in advance, for the consumer goods produced in Department II could hardly be used as means of production in Department I:

> . . . this assumption is possible only so long as we envisage the surplus value earmarked for capitalization purely in terms of value. The [scheme], however, implies that this part of the surplus value appears in a definite material form which prescribes its capitalization. Thus the surplus value of Department II exists as means of subsistence, and since it is to be realized only as such by Department I, this intended transfer of part of the capitalized surplus value from Department II to Department I is ruled out, first because the material form of this surplus value is obviously useless to Department I, and secondly because of the relations of exchange between the two Departments which would in turn necessitate an equivalent transfer of the products of Department I into Department II. It is therefore downright impossible to achieve a faster expansion of Department I as against Department II within the limits of Marx's [scheme].[48]

To assess the significance of this argument several observations must be made. In the first place, Luxemburg made no allowance for unplanned inventory adjustments, a form of "reserve" that would later play an important role in Preobrazhensky's analysis of the capitalist cycle. It is true that Marx's scheme of reproduction did not include inventories, but Marx was working at a high level of abstraction. In

concrete capitalism, as he commented elsewhere, "This is where merchant's capital comes into play, keeping available in warehouses supplies for growing consumption, individual and industrial. . . ."[49] As capitalism advanced, Marx expected inventories to grow in importance:

> The greater the capital, the more developed the productivity of labor and in general the stage of capitalist production, so much the greater is also the mass of commodities found in circulation on the market, in transition from production to consumption (individual and industrial), and so much the greater is the certainty for each particular capital that it will find the conditions for its reproduction ready on the market.[50]

It must be emphasized that the inventories Marx had in mind were not the result of planned "relative overproduction"; rather they reflected the fact that commodities are not normally made to order, and in a market economy there is never any *a priori* proportionality. In fact, quite the opposite was true: capitalist inventories resulted from the anarchic "competition of capitals," wherein every capitalist tried to "use as much labor and therefore to realize as much surplus value as possible" at the expense of his competitors.[51]

More important than commodity reserves, however, was the fact that even competitive capitalism also possessed limited reserves of production capacity, a point stressed by Preobrazhensky in *The Decline of Capitalism*. For Preobrazhensky this circumstance brought two consequences: first, unused production capacity in Department I would facilitate a cyclical recovery without creating the deficit of means of production mentioned by Rosa Luxemburg; and second, the availability of similar reserves in Department II would allow the replacement of currently used-up fixed capital to be postponed. In this way Department I would in fact receive a "loan" from the fixed capital of Department II: for the time being capitalists in II would sell to their counterparts without making equivalent purchases.[52]

Finally, Preobrazhensky went one step further beyond Rose Luxemburg by incorporating into his analysis the regulating role of the law of value, an integral feature of the classical cycle. Luxemburg assumed all commodities must be sold at their value. Marx had already demonstrated that market prices frequently diverged from value in response to supply and demand. The result of a deficit in I and a surplus in II was not, therefore, even to raise the question of transforming consumer

goods into means of production: instead of a transfer of *commodities* there would occur a transfer of *value*. The output of Department I would sell at a market price in excess of its value; that of Department II would sell below its value; and the exchanges, in value terms, would thus be balanced. Should capitalists in II not make good their postponed fixed-capital replacements until the expansion had already ended with a crisis in I, then, as Preobrazhensky saw, the need to compensate these losses in II would in fact provide the new demand needed to initiate capitalism's cyclical recovery. The real problem for Preobrazhensky was not to explain the classical business cycle but to assess how the *planned* production reserves of monopolistic capitalism might impair or even eliminate the classical mechanism of spontaneous recovery. Before that question could even be formulated properly it was first necessary to establish the fact that stagnation in a capitalist economy could not be the result of chronically inadequate markets. What then was the significance of foreign trade?

For Preobrazhensky the answer came directly from the analysis of the cycle. Foreign markets were a buffer needed to moderate the shocks arising from the inevitable disproportionalities of unplanned production. In the absence of foreign sales the typical capitalist crisis was accompanied by widespread destruction of existing fixed capital. Capitalism would destroy its own internal market, spontaneously created during the stage of economic expansion. With access to relatively minor foreign markets, on the other hand, unplanned overproduction could be disposed of, making it easier "to rise to the next level of expanded reproduction and thereby to expand the *basic market*, which exists within capitalism itself."[53] In effect Preobrazhensky discovered what Keynesians would later refer to as the "foreign trade multiplier," or the notion that a small increase of exports might either generate a multiple expansion of domestic sales or forestall a multiple contraction. Preobrazhensky summarized his refutation of Rosa Luxemburg in these terms:

> Increased opportunities to sell abroad must have the effect of promoting absorption of the unrealized balances. . . . The sale of even a part of these balances . . . has enormous significance for the entire system. That is true not because of the absolute weight of the new market, which is generally insignificant . . . but because sales in the foreign market will make it possible, at a given moment, to halt the contraction of the production apparatus of both departments at a higher level than would be the case

> if this reserve of capitalist flexibility were not brought into play. Contrary to Rosa Luxemburg's thinking, the external market is not important in and of itself, but only because it permits avoidance of a far greater contraction of that market which capitalism acquires internally. This internal market is incomparably more significant for capitalism. . . .[54]

Although there is no evidence in Preobrazhensky's text to indicate that he was influenced by Lenin's early writings on this subject, the conclusions reached by the two men are similar enough to warrant consideration. During the 1890s Lenin debated with the Russian Narodniks (agrarian socialists) the exact same issue later raised by Rosa Luxemburg. Lenin believed Marx had shown in Volume 2 of *Capital* "that capitalist production is quite conceivable without foreign markets, with the growing accumulation of wealth and without any 'third parties.'"[55] To say that capitalism created its own internal market was obviously not to claim that the social product could invariably be realized without "difficulties" springing from the "unevenness of development." But Lenin emphasized that foreign sales were necessitated by the disproportionate allocation of capital and not by a chronic problem of markets:

> The various branches of industry, which serve as "markets" for one another, do not develop evenly, but outstrip one another, and the more developed industry seeks a foreign market. This does not mean at all "the impossibility of the capitalist nation realizing surplus value." . . . It merely indicates the lack of proportion in the development of the different industries. If the national capital were distributed *differently*, the same quantity of products could be realized within the country. But for capital to abandon one sphere of industry and pass into another, there must be a crisis in that sphere; and what can restrain the capitalists threatened by such a crisis from seeking a foreign market, from seeking subsidies and bonuses to facilitate exports, etc.?[56]

In Lenin's view underconsumptionist theories of capitalist expansion were a "romantic" distortion of reality. Echoing Marx's reference to tautology, Lenin recalled that "it is precisely in the periods which precede crises that the workers' consumption rises."[57] The Marxist theory of the cycle grew out of the contradiction "between the social character of production (socialized by capitalism) and the private, individual mode of appropriation," which resulted in uncoordinated investments, unevenness, and crises.[58] "To put it more

briefly, the [romantic] theory explains crises by underconsumption (*Unterkonsumption*), the [scientific] by the anarchy of production. . . . But the question is: does the second theory deny the fact of a contradiction between production and consumption . . . ? *Of course not*. It fully recognizes this fact, but puts it in its proper subordinate place. . . . It teaches us that this fact cannot explain crises."[59] Nothing could be more senseless, Lenin affirmed, than to say "that Marx did not admit the possibility of surplus value being realized in capitalist society, that he attributed crises to underconsumption."[60]

By the time Lenin wrote *Imperialism, the Highest Stage of Capitalism* (1916) his interest had moved from *commodity* exports to exports of *capital*. Accounting for the growth of foreign investments, Lenin mentioned both the unusually high profits to be earned in "backward countries" and the new obstacles to domestic investment within the leading industrial nations. An enormous "surplus of capital" was said to have emerged in the metropolitan centers, with the result that "capitalism cannot find a field for 'profitable' investment."[61] One such obstacle was the growing monopolization of many branches of industry. To the extent that Preobrazhensky concentrated upon precisely this phenomenon, *The Decline of Capitalism* can be interpreted as a further development of the Leninist theory of imperialism.

It is a fact, however, that Preobrazhensky did not attribute the same significance Lenin did to one type of capitalist unevenness; that is, the unevenness with which monopolistic organizations embraced the various branches of production. In this respect it could be argued that Preobrazhensky followed too closely the methodology Marx used in the reproduction schemes. By leaving out "third parties" and sources of income outside the sphere of capitalist production, Marx had posited the theoretical abstraction of "pure" capitalism. Preobrazhensky would similarly posit the existence of "pure" monopolism.[62] Apart from the precedent set by Marx, a more proximate influence upon Preobrazhensky in this connection can be located in the writings of Rudolf Hilferding and Nikolai Bukharin. Hilferding was the first Marxist to consider the possibility that the law of the centralization and concentration of capital might ultimately point in the direction of a "general cartel." Bukharin seized upon Hilferding's speculation and discovered in modern imperialism the new Leviathan of a fully organized "state-capitalist trust." From Lenin's perspective both writers committed the fundamental error of exaggerating capitalism's organizational potential and forgetting that monopoly invariably coexists with and presupposes its opposite, competition.

3. Imperialism and "Organized Capitalism"

Rudolf Hilferding published his major theoretical work, *Finance Capital*, in 1910. Hailed as the missing fourth volume of *Capital* when it first appeared, the work concentrated on organizational change in modern capitalism and Marx's theme that the socialization of production was inherent in the growth of gigantic industrial firms. The displacement of living labor power by machines, or the rise of the organic composition of capital, was shown to lengthen the time required for the transformation of newly invested money capital through the stage of fixed capital and back into money capital in the form of depreciation funds and new surplus value. The greater scale of fixed-capital commitments implied a corresponding growth of depreciation funds awaiting reinvestment. Conversely, the lengthening of the "turnover period" also meant that from time to time short-run market changes might create serious illiquidity problems for individual firms. Playing the mediating role between enterprises with idle cash reserves and those in need of liquidity, the banks assumed a greater importance in modern capitalism than ever before. Once involved in financing industrial operations through the distribution of loans, the banks found themselves obliged to protect their interest by collaborating in the formation of trusts and cartels. The larger the trusts and cartels, the greater were their credit requirements. By way of this reasoning Hilferding found another dimension to the centralization and concentration of capital: industrial combinations and the centralization of banking capital were mutually reinforcing, the result of their interaction being eventual merger between the banks and industry. "I call bank capital," wrote Hilferding, "[or] capital in money form which is actually transformed in this way into industrial capital, finance capital. . . . An ever-increasing proportion of the capital used in industry is finance capital, capital at the disposition of the banks which is used by the industrialists."[63]

The irreversible advance of capitalist organization both confirmed Marx's theory of concentration and simultaneously undermined his theory of value.[64] Through centralized control of production organized capital strove to surmount the price mechanism of the capitalist market and to draw off a share of the surplus value created in unorganized branches of industry. Cartel profit, according to Hilferding, was "nothing but a participation in, or appro-

priation of, the profit of other branches of industry."[65] The artificial suppression of noncartel profit provided further insight into the origin of imperialism: in pursuit of acceptable profits new capital would tend to emigrate to the colonial periphery. Insofar as cartels attempted to preserve monopoly prices by preventing overinvestment in their own sphere of activity, the export of capital would be intensified. Thus Hilferding came to the same conclusion as Marx: the principal force behind foreign investments was the quest for a higher rate of profit. "The precondition for the export of capital is the variation in rates of profit, and the export of capital is the means of equalizing national rates of profit."[66]

Emphasizing the connection between imperialism and the profit rate, Hilferding also believed, like Lenin and Preobrazhensky, that "the opening of new markets is an important factor in bringing an industrial depression to an end, in prolonging a period of prosperity, and in moderating the effects of crises."[67] Crises themselves were attributed to both interindustrial disproportionalities and the cyclical incursion of wage rates upon the return to capital.[68] The scale of production was the determinant of consumption; the narrow basis of final demand was "only a general condition of crises"; the immediate cause of cyclical disruptions had to be found "in the nature of capital" itself.[69] For Hilferding the appeal to chronic underconsumption as an explanation of crises was nonsense "since no periodic phenomenon can be explained by constant conditions."[70] The pattern of capitalism's movement was governed by the rate of profit, which in turn depended upon fluctuations in prices. It followed that "disruption of . . . proportional relations must be explained in terms of . . . a distortion of the price structure. . . . Since such disruptions occur periodically, the distortions of the price structure must also be shown to be periodic."[71]

In his investigation of price changes Hilferding rediscovered Marx's analysis of differential supply elasticities in Volume 3 of *Capital*. Marx had shown that supplies of raw materials responded slowly to changes in demand, causing prices to vary widely.[72] Just as natural conditions dictated the relatively inelastic supply of organic products, Hilferding saw that an unusually high organic composition of capital in heavy industry might have the same effect. In the engineering and metallurgical branches, for example, adjustment to an expanding market required enormous capital expenditure and a considerable time lag: "The longer it takes to invest in new plant the more difficult it is to adapt to the

needs of consumption; and the longer supply lags behind demand the more strongly do prices rise and the more widespread does the pressure to accumulate capital become in such industries."[73] The inelasticity of supply and technological barriers to entry provided the starting point for cartel pricing. Seeing the spontaneous advantage of differential price movements, the capitalists in certain branches of industry would organize in order to control supply, and therefore prices, at all stages of the cycle. At this point Hilferding found himself addressing the problem first raised by Engels: if organized capital could control prices and profits, would that not imply the end of the business cycle?

Hilferding's response was emphatically negative. For all their rational organization, the individual members of a cartel faced an irresistible temptation to thwart the collective interest by overinvesting in response to upwardly distorted prices in the rising phase of the business cycle.[74] Normally the central office of a cartel allocated production quotas based upon the production capacity of the members, an increase in capacity being the obvious way the individual firm might enlarge its market share. Competition within the organization thereby contributed to the onset of relative overproduction. The greater the unplanned redundancy of production potential, the more stubbornly would the cartel attempt to maintain prices once the crisis arrived, and the more aggravated would its effect be upon the unorganized capitalists. By contributing to bankruptcies elsewhere, the cartels in effect undermined their own prices and promoted the spontaneous breakup of the organization. Cartels neither prevented crises nor reduced their severity; they could only "modify" them to the extent that they temporarily transferred the negative effects to nonorganized industries.[75]

The real problem with organized capitalism was that it stood halfway between the anarchy of the classical market and the universal planning that would come with the socialist revolution. The logical question to arise from Hilferding's study was just how far capitalist organization might advance. In response to this issue Hilferding allowed his imagination to wander:

> If we now pose the question as to the real limits of cartelization, the answer must be that there are no absolute limits. On the contrary there is a constant tendency for cartelization to be extended. . . . The ultimate outcome of this process would be the formation of a general cartel. The whole of capitalist production would then be consciously regulated by a single body which would determine the volume of production in all branches of industry.[76]

In a fully organized capitalist society the law of value would no longer determine the allocation of the forces of production. The "social division of labor," mediated by money and the market, would be replaced by a "technical division of labor," mediated by a central office that would prevail over the whole of production as if over the members of a single cartel or the internal divisions of a single enterprise. For the first time in history capital would overcome its internal contradictions and appear as a "unitary power."[77] In speculative wanderings of this type Hilferding's attitude toward finance capital became almost worshipful, the concept of the general cartel serving as the analogue of Marx's model of "pure" capitalism.

For all these fantasies, however, Hilferding always returned to reality. For the immediate future he realized that cartels would in fact coexist with the unorganized industries whose surplus value they appropriated. At most the great organizations of finance capital would achieve partial regulation of individual branches of industry, and such partial regulation had "absolutely no influence upon the proportional relations in industry as a whole."[78] In the longer run Hilferding saw in the class struggle an insurmountable barrier to the "unitary power" of capital:

> The tendency of finance capital is to establish social control of production, but it is an antagonistic form of socialization, since the control of social production remains vested in an oligarchy. The struggle to dispossess this oligarchy constitutes the ultimate phase of the class struggle between bourgeoisie and proletariat.[79]

The outcome of the class struggle would be determined by which class captured and maintained control of the capitalist state. The imperialist bourgeoisie had already erected a "strong state" for purposes of overseas expansion.[80] Because the concentration of capital transformed the "guerilla war of the trade unions against individual employers" into society-wide confrontations between labor and capital, there was now a threat that the state would be called upon to blunt the strike weapon and disarm the workers. The matter of strikes might be "transformed from a trade union question into one of political power." It was therefore vital for the working class "to secure for itself the strongest possible influence in political bodies, and to have representatives who will take up boldly and independently the interests of the workers against those of the employers."[81]

It is ironic that Rudolf Hilferding's political prescriptions proved to

be just as short-sighted as his economic analysis was acute. The flaw in his argument, common to all Social Democrats, was the belief that the working class might seize power peacefully and that the capitalist state, "conquered" through an electoral victory, might serve the class interests of the workers just as it had served the bourgeoisie. Although Lenin's *Imperialism* acknowledged a profound debt to Hilferding's *Finance Capital*, Lenin also warned that the author of *Finance Capital* displayed an inclination to "reconcile Marxism with opportunism."[82] In the 1920s Hilferding substantiated Lenin's presentiment by twice serving as finance minister in the Weimar Republic. But the real test of Social Democratic resistance to the imperialist state came with the world war. Whereas Hilferding personally opposed war credits for German militarism, most members of the party joined in the war hysteria. There is even further irony in the fact that Hilferding had anticipated just such a triumph of militarism over proletarian internationalism. In *Finance Capital* he had analyzed the ideology of the imperialist in these terms:

> The imperialist wants nothing for himself. . . . For him [the] nation is real; it lives in the ever-increasing power and greatness of the state. . . . The subordination of individual interests to a higher general interest . . . is thus achieved; and the state alien to its people is bound together with the nation in unity, while the national idea becomes the driving force of politics. Class antagonisms have disappeared and been transcended in the service of the collectivity. . . . This ideal, which seems to provide a new bond for the strife-ridden bourgeois society, will doubtless meet with an increasingly enthusiastic reception as the process of disintegration of bourgeois society continues.[83]

By emphasizing the unifying pretensions and potential economic role of the state, Rudolf Hilferding inaugurated a Marxist reassessment of the relation between politics and economics that would lead directly to Preobrazhensky's study of fascism. Marx had seen the artificial community of the state as the dialectical counterpart of class antagonisms in civil society. In a famous passage in *The Communist Manifesto* he had announced the real purpose of the state executive by calling it a "committee to manage the common affairs" of the ruling class. If Social Democrats erred before 1914 by interpreting this passage too figuratively, after that date there arose the opposite danger of understanding it too literally. Nowhere did this temptation become more obvious than in the writings of Lenin's young associate, Nikolai Bukharin.

During the war years every European government, that of Germany in particular, intervened in production and distribution on an unprecedented scale. In this trend Bukharin found confirmation of Hilferding's hypothesis that the role of the state was changing in accordance with capitalism's inherent laws. By integrating the production organizations of modern capitalism with an over-arching political structure, the ruling class of capitalist society had achieved a greater degree of internal coherence than ever before. Marx had studied the epoch of competitive capitalism, when political pluralism and rival parties had been needed to represent the divergent interests of various groups within the ruling class. But with the advent of imperialism Bukharin claimed that "all of the formerly differentiated political organizations of the ruling classes are gradually losing their *differentia specifica*, being transformed into a single imperialist party. All-embracing blocs of all the imperialist parties . . . complete unity on questions of foreign policy, the disappearance of all the remnants of democracy and the former liberalism: all of these trends clearly illustrate the process."[84] Carried away by Hilferding's idea of capitalism as a "unitary power," Bukharin exclaimed that the integration of industrial and banking capital had eliminated "the different subgroups of the ruling classes, uniting them in a single finance-capitalist clique."[85] A new form of "collective capitalism" had arisen; the imperialist state was now functioning as "a collective, joint capitalist."[86]

The need to concentrate economic authority had converted "each developed 'national system' of capitalism into a 'state-capitalist' trust," or what Bukharin described as a "new Leviathan beside which the fantasy of Thomas Hobbes looks like a child's toy."[87] Not only had the state taken over some forms of enterprises and entered into partnership with separate capitalists in others, but other forms of controls had also proliferated, governing the types of commodities produced, the materials used, and the prices charged. The flow of commodities across national boundaries was regulated by import and export controls; within national frontiers rationing performed a similar function. "As a result, the anarchic commodity market is largely replaced by organized distribution of the product, the ultimate authority . . . being the state power."[88] Implementing "the collective will of the consolidated bourgeoisie as a whole," the triumphant state at last made it possible to overcome the struggle over the distribution of surplus value, which for Marx had been the source of all change in capitalist society. The whole of society's money capital had been mobilized by the state bank through the issue of diverse forms of securities, and the capitalists had been

converted into "shareholders," receiving "dividends" from the all-embracing state-capitalist trust.[89] In Bukharin's mind Hilferding's dream of organized capitalism had become a grotesque nightmare. In *The Economics of the Transition Period* (1920) Bukharin carried this argument to its logical conclusion: capitalism was experiencing a transition "from an irrational system into a rational organization, from an economy without a subject into an economic subject."[90]

"In sum," Bukharin concluded, "the reorganization of the productive relations of finance capitalism has followed a path towards universal state-capitalist organization, involving the elimination of the commodity market, the conversion of money into a unit of account, the organization of production on a nation-wide scale, and the subordination of the entire 'national-economic' mechanism to the goals of international competition, i.e., mainly to war."[91]

Lenin agreed neither with Bukharin's exhaltation of the state nor with the economic analysis from which it arose. In *The Poverty of Philosophy* Marx had long ago refuted the thesis of "pure" monopolism, arguing that capitalist organization advanced unevenly with the implication that capital could never in fact become a "unitary power":

> In practical life we find not only competition, monopoly and the antagonism between them, but also the synthesis of the two, which is not a formula, but a movement. Monopoly produces competition, competition produces monopoly. Monopolies are made from competition; competitors become monopolists. If the monopolists restrict their mutual competition by means of partial associations . . . competition becomes [more desperate] between the monopolists of different nations. The synthesis is of such a character that monopoly can only maintain itself by continually entering into the struggle of competition.[92]

Without quoting Marx directly, Lenin made the same point: "The monopolies, which have grown out of free competition, do not eliminate the latter, but exist over it and alongside of it, and thereby give rise to a number of very acute, intense antagonisms, frictions and conflicts."[93] To forget this interpenetration of opposites was to ignore "the very profound and fundamental contradictions of imperialism: the contradiction between monopoly and free competition which exists side by side by it, between the gigantic 'operations' (and gigantic profits) of finance capital and 'honest' trade in the free market, the contradiction between cartels and trusts on the one hand, and noncartelized industry

on the other, etc.''[94] For Lenin a ''pure'' variant of capitalism was nothing more than a fantasy. ''The very concept of purity,'' he declared, ''indicates a certain narrowness, a one-sidedness of human cognition, which cannot embrace an object in all its totality and complexity.''[95] When Bukharin proposed in 1919 to include in the party program an integral picture of imperialism modeled after his own writings, Lenin retorted that no integral picture was possible, for imperialism was not a ''pure'' phenomenon: ''Pure imperialism, without the fundamental basis of [competitive] capitalism, has never existed, does not exist anywhere, and never will exist. This is an incorrect generalization of everything that was said of the syndicates, cartels, trusts and finance capitalism, when finance capitalism was depicted as though it had none of the foundations of the old capitalism underlying it.''[96] From Lenin's viewpoint the most essential feature of imperialism was ''not pure monopolies, but monopolies together with exchange, the market, competition and crises.''[97]

Preobrazhensky wrote *The Decline of Capitalism* shortly after the Stalinists humiliated Bukharin, and he was prudent to quote Lenin on the coexistence of monopoly and competition.[98] All the same, a close reading of the text will show that uppermost in Preobrazhensky's mind was a new form of competition, monopolistic competition, or the rivalry between organized capitalists to redistribute surplus value by means of price manipulation. The ''potential'' for new competition always existed,[99] and monopolistic associations were said to be unstable due to the internal struggle already cited by Hilferding.[100] But Preobrazhensky did not specifically include in the model of ''pure'' monopolism a second, unorganized sector of free competition in the classical sense. This assumption was instrumental in explaining the nearly complete absence of competitive fixed-capital renovation; it also created the analytical need to locate the stimulus for any important period of economic expansion in winning new markets at the expense of monopolists in other countries—not ''third-party'' markets, it should be emphasized, but markets elsewhere within the world capitalist system. Real competition was therefore found primarily in the international context, whereas the ''potential'' of new domestic competition provided the rationale for planned reserves of fixed capital. In this respect Preobrazhensky's work more closely resembled Bukharin's than Lenin's.

During the Soviet industrialization debates of the 1920s Bukharin and Preobrazhensky became inveterate enemies. Preobrazhensky's

proposals for "primitive socialist accumulation," or the monopoly pricing of manufactured commodities in order to draw off a net transfer of values from peasant agriculture into socialist industry, were essentially but a practical application of Hilferding's study of cartel pricing. In opposition to this policy Bukharin, author of the idea of a fully planned "state-capitalist trust," took the paradoxical view that socialist construction required restoration of market relations between town and country. For Preobrazhensky it was impossible to understand how Bukharin could attribute planning to capitalism while urging that socialism depended upon the law of value.[101]

In his most important theoretical work of the 1920s, *The New Economics* (1926), Preobrazhensky made it perfectly clear that in his judgment the law of value had not functioned as autonomous regulator of the capitalist market for some time. Defining the law, he noted that it was first and foremost a *spontaneous* regulator, requiring that "the interference of the state in the production process . . . be reduced to a minimum, and also that there be no regulation of prices by the monopolistic organizations of the entrepreneurs."[102] The rise of syndicates, cartels, and trusts; a fusion of the biggest trusts with banking capital; and the growth of international capitalist trusts, all were factors preventing the traditional operation of classical market laws. The German war economy therefore represented an extreme variant of a universal pattern of development: "The regulation of the whole of capitalist production by the bourgeois state reached a degree unprecedented in the history of capitalism. Production . . . was transformed *de facto* into planned production in the most important branches. Free competition was abolished, and the working of the law of value in many respects was almost completely replaced by the planning principle of state capitalism."[103] After the war the *status quo ante* had not been restored: "The restriction of the law of value . . . not only did not cease . . . but acquired still greater force. . . ."[104] American monopolies imposed their own value relationships upon the world economy, with the result that the law of value was finally "passing into the phase in which it is transformed and gradually dies out."[105] Lest any ambiguity remain, Preobrazhensky was quite specific in saying that the law of value was dying out "not [merely] within the separate national economies, . . . *but in the arena of the world market as a whole*. This is the special feature of postwar economics."[106] To complete this monopolistic system one further element was needed—the capitalist state must finally smash the power of the trade unions and suppress the law of

value in the last remaining market, that for labor. In other words, the analysis of fascism given in *The Decline of Capitalism* turned out to be a direct projection of Hilferding's speculative portrayal of capitalism as a "unitary power" and Bukharin's theory of the "state-capitalist trust."

As Preobrazhensky saw it, fascism was not a historical accident, a freakish perversion of history, but rather an objective necessity inseparable from the organizational structure of modern capitalism. The planning of monopolistic reserves had impeded new investments and thwarted the classical mechanism of economic recovery. The sole remaining method with which to restore profitability and investments, as economists throughout Europe argued during the 1930s, was to reestablish "flexibility" on the labor market by driving down wages. In the epoch of free competition capitalism had possessed greater elasticity "in terms of its ability to pass from one cycle of expanded reproduction to another."[107] Accordingly, the period of bourgeois democracy in politics had been "the counterpart of the period of classical capitalism, free competition, and extensive operation of the law of value in the economy," a period when the ruling class had been assured of satisfactory profits without resorting to state-imposed wage restrictions.[108] Now capitalist organization had changed, and with it the political system: "monopolistic capitalism brings extraordinary reinforcement of the tie that binds the trusts and other capitalist organizations to the bourgeois state; it concentrates the instruments of economic, political, and cultural pressure upon the proletariat and the whole of society in the hands of a small group of exploiters at the summit, who in turn subordinate to themselves the bureaucracy of the reformist trade unions along with the so-called socialist parties."[109] Fascism had become "a universal tendency of monopolistic capitalism in our day," against which the only safeguard was proletarian revolution.[110]

No other analysis by a Soviet writer linked fascism so comprehensively to Marxist economic theory as did Preobrazhensky's.[111] One might justifiably inquire, therefore, just why the effort reaped such abuse in the Stalinist press. Apart from the fact that *The Decline of Capitalism* was related to the writings of Bukharin, another possibility should also be considered. By 1931 Preobrazhensky—previously condemned by Stalin's faction as a "superindustrializer" bent upon "exploiting" the peasantry—became alarmed by the consequences of forced collectivization and the first five-year plan. In a manuscript submitted to one of the leading economic journals he warned that the

pace of industrialization must decelerate during the second plan in order to ensure greater material incentives to workers and peasants. The ''hypertrophy of tempos in the development of heavy industry'' had to give way to a period of adjustment, lest a crisis of overproduction develop in Department I. The manuscript, not surprisingly, was never published. One critic who saw the work remarked that in Preobrazhensky's schemes he detected ''a Trotskyist denial of the socialist character of our economy . . . of the fact that we have entered the period of socialism and that a planned economy guarantees crisis-free development.''[112]

It is a fact that Trotsky, writing in exile, called for the same type of breathing space as had Preobrazhensky.[113] Trotsky feared that by ignoring the needs of workers and peasants the Stalinists were creating an artificial scarcity of consumer goods that would perpetuate the power of the bureaucracy—the final arbiter of who should live or starve. Both theory and common sense suggested that in the absence of material incentives the Soviet regime would inevitably resort to planned brutalization of the workers, terror, and a dictatorship *over* rather than *of* the proletariat. It appears that Preobrazhensky came to the identical conclusion. In his categorization of countries as they approached fascism, he saw one group ''where the elements of fascism are maturing but still have not come sufficiently to light. Philistine public opinion considers these countries to be 'pillars' of democracy, safe from fascism.''[114] Firmly committed to socialism's goal of raising popular living standards, Preobrazhensky seems to have considered the Stalinist regime to be one such ''pillar'' of democracy. Through a curious (but understandable) twist of irony he and Bukharin appear to have arrived at the same conclusion: that it was really Stalinism that represented the new Leviathan, a regime bent upon plundering the workers and in that sense a perverse manifestation of the ''universal tendency'' toward fascism.[115] As in the countries of monopolistic capitalism, the Stalinists were ruthlessly extracting surplus value and had become ''a small group of exploiters at the summit.'' In view of the catastrophic decline of Soviet living standards, it is not surprising that Stalinist propaganda sought to counter such criticism by explaining the Great Depression in the capitalist world in terms of a neo-Luxemburgist theory of chronic underconsumption.

4. Neo-Luxemburgism and the "General Crisis" of Capitalism

A neo-Luxemburgist tendency in Soviet writing first became apparent in the work of Eugen Varga, head of the Institute of World Economics and World Politics for two decades. Throughout most of the 1920s few Soviet economists expressed sympathy with the ideas of Rosa Luxemburg, being much more directly influenced by Rudolf Hilferding. By 1929, however, a new discussion emerged around the issue of what came to be called "Varga's Law." This new "law" stated that in "pure" capitalism the renovation and expansion of fixed capital automatically caused a decline in the number of productive workers and a chronic realization crisis. As a dogmatic theory of technological unemployment, Varga's argument flew in the face of what Marx had written in *Capital*.[116]

Marx had maintained that despite technological change and the rising organic composition of capital, the absolute volume of employment would continue to grow, albeit at a slower pace than expenditures on plant, machinery, and materials. In Marx's words: "With the growth of the total capital, its variable constituent, the labor incorporated in it, also does increase, but in a constantly diminishing proportion."[117] Luxemburg had understood this part of Marx's argument perfectly. In reply to another critic of *Capital* she had written that "an absolute decrease of the variable capital is in striking contrast to reality. Variable capital is in point of fact a growing quantity in all capitalist countries; only in relation to the even more rapid growth of constant capital can it be said to decrease."[118] Likewise Preobrazhensky commented: "When speaking of the influence of technological progress in terms of displacing men by machines, . . . Marx began with the fact that the very manufacture of machines requires a growing number of workers in the machine-producing branches. The result is an increase of the number of workers and an even greater increase of . . . production . . . as the perfection of equipment advances."[119]

Varga's Law was *neo*-Luxemburgist in the sense that it embraced Rosa Luxemburg's central theme that capital accumulation destroyed markets, but implied that Luxemburg's conclusions had been correct

for the wrong reasons. In other words, whereas Luxemburg argued that the growth of capitalism eliminated the handicraft (or "third-party") incomes needed to realize surplus value, Varga's Law contended that capital accumulation in addition eliminated the incomes of the industrial working class. The orginal source of Varga's confusion was Marx's statement in *Capital* Volume 3 that the "final cause of all real crises" lay in the restricted consumption of the masses.[120] At the end of 1927 Varga paraphrased this remark to say that there was a chronic contradiction between capitalism's productive forces and the volume of social "consuming power." The formation of monopolies and industrial rationalization meant "a decrease in the proportion of variable capital to the yearly value of products, i.e., a decrease of the working-class share, or a still sharper operation of the 'final cause.'"[121] This careless observation could only add a new dimension of uncertainty to an already vexed issue. In *Capital* Marx had shown that even as the number of industrial workers grew, the rise of the organic composition of capital meant the share of wages in the total value of the social product *must* decline. It could not be otherwise, for a growing portion of the social product would necessarily go, by definition, to replacement of constant capital. Varga's interpretation amounted to an assertion that crises occurred because workers did not have the income with which to *consume machines*!

In the spring of 1928 Varga's gravitation toward Luxemburg became more pronounced. Data from the United States indicated that for the first time in history the number of productive workers (those creating surplus value) had declined during a period of industrial expansion. Between 1919 and 1926 employment in agriculture, mining, industry, and railway transportation had fallen by 8 percent.[122] Varga thought the statistics proved that "the postwar development of capitalism in the USA fully corresponds to the Marxist theory of the development of 'pure' capitalism. An absolute reduction in the number of workers takes place together with a rapid . . . increase in the volume of commodities produced per worker."[123] The rate of labor displacement had exceeded the rate of reabsorption because no new markets were available: American farmers had ceased to be "third parties" and were by now engaged almost exclusively in capitalist agriculture. Use of new technology had brought "a massive displacement of workers by machines" and "a drop in the sum total of industrial wages." Without renewed access to "third-party" markets no compensation could be found for the decline of working-class incomes. The relationship

between this mode of thought and Luxemburg's *Accumulation of Capital* was so obvious as to require acknowledgment: "The actual development of the USA is approaching the condition of 'pure' capitalism, and in this regard the question arises—or more correcly, could be raised by the supporters of Rosa Luxemburg's theory—as to whether obstacles now emerge to the further accumulation and realization of surplus value."[124] Within a year Varga's critics pointed out that subsequent data from the United States explicitly refuted the new law: from March 1928 to March 1929 the number of industrial workers in America in fact grew by more than 8 percent. But by this time Varga's pattern of thought was established and he proceeded to reformulate it throughout the 1930s in accordance with his own unique interpretation of *Capital*.

In *The Great Crisis and Its Political Consequences* (1934) Varga attributed the theory of disproportionalities to bourgeois political economy[125] and repeated his notion that a rising organic composition of capital brought a contradiction between society's "consuming power" and the total value of commodities being produced.[126] Real, as opposed to monetary, accumulation was now acknowledged to have temporary market-creating consequences, but Varga insisted that the final result of capital accumulation was "continuous relative overproducion."[127] Marx had used this description to characterize socialist planning, wherein deliberate production for inventory would allow for the uneven physical wear and replacement of machinery. Where Marx had seen *unplanned* capitalist inventories causing *cyclical* crises of relative overproduction, Varga spoke instead of a *chronic* "general crisis," whose consequence would be a "depression of a special kind." Notwithstanding initial indications of economic recovery by the mid-1930s, he wrote that "the present depression (in contrast to 'normal' depressions) does not furnish a sufficient basis for a boom in capitalist economy. The special nature of the depression consists in the deformation of the industrial cycle under the influence of the general crisis of capitalism."[128] And what was the source of this new form of noncyclical crisis? Varga answered by pointing to the final disappearance of "third-party" producers in the capitalist countries—the end of the "depeasantizing" process—and the absence of virgin markets waiting to be exploited.[129] The results were chronic unemployment, a chronic redundancy of fixed capital, and therefore a chronic excess of money capital with no prospect of being reinvested.

Preobrazhensky agreed with the official Soviet view that the most irrational aspect of modern capitalism was "precisely the

disproportion between the existing (and still more the potential) productive forces of society and that part of them which is in fact being utilized by the capitalist system."[130] He was just as convinced, however, that Varga and the Stalinists had misunderstood the most crucial theoretical issue. "The basic fact," he protested, "is that expanded reproduction throughout the world economy as it now exists, would itself resolve the problem of the market—even if the condition of separate branches of production or individual countries were to vary."[131] The task at hand was not to "explain" the general crisis by reciting its characteristics; rather Marxists had to discover why the capitalists were not following the traditional pattern of creating new markets within the capitalist system. The answer lay in the structural transformation associated with monopolistic competition.

In classical capitalism a cyclical crisis had always necessitated what Marx called the "premature" renovation of factory equipment. The problem was that monopolists could now control prices and thus protect their enormous investments in existing fixed capital. Thus the profit motive continued to operate, but its effects were the reverse of what they had been previously. As Preobrazhensky summarized:

> The quest for profit half a century ago was just as intensive as it is today. But at that time, that is, in conditions of free competition, in order to acquire this profit the most powerful capitalist enterprises were required to replace their equipment. Thus they were able to maintain lower prices, with which they destroyed the more backward enterprises of their competitors. Today, under monopolism, the very same pursuit of profit compels the largest trusts to follow the line of least resistance—to curtail production when demand falls, to prevent price reductions, and in the case of a growth of demand to raise prices, without resorting to reconstruction of the old enterprises and frequently by setting in motion backward enterprises held in storage [or reserves of production capacity].[132]

Instead of alleviating crises, the new strategy adopted by monopolists merely prolonged them. Capitalism was therefore suffering a "thrombosis" in its arteries of production and distribution. Were the monopolists not so beguiled by their immediate interests, were they not so determined to defend existing capital against premature devaluation, they would see that the same multiplier acted in the domestic economy as in foreign trade. Anticipating the analysis later associated with John Maynard Keynes, Preobrazhensky argued that the monopolists might save "hundreds of millions" by preserving old equipment; but in so

doing they would make it impossible "to produce the tens of billions of new equipment and new means of mass consumption that would be created by the tens of millions of unemployed workers in the world economy, workers who instead are condemned to drag out the miserable, semistarvation existence of the unemployed and the impoverished. . . . What is the significance of the wasteful use of equipment in the epoch of free competition when compared to this paralysis of labor power?"[133]

The superiority of Preobrazhensky's analysis over Varga's can be measured by the predictions the two men offered. Varga dismissed the possibility of cyclical recovery and expansion; Preobrazhensky was more circumspect. Inventories would eventually decline, he pointed out, and fixed capital must gradually wear out and be replaced. Accordingly, recovery remained a theoretical possibility, although serious doubt existed as to whether it would attain classical dimensions. The one factor that neither Varga nor Preobrazhensky fully anticipated was the growth of expenditures by the capitalist state with the approach of the Second World War. In *The Accumulation of Capital* Luxemburg had already noticed that armaments production was a "pre-eminent means for the realization of surplus value; it is in itself a province of accumulation."[134] Had Preobrazhensky not been murdered by the Stalinists in 1937, he very likely would have assessed the matter somewhat differently, saying that rearmament renewed the cycle of fixed-capital renovation and expansion.

In the current Soviet analysis of capitalism the role of state expenditures is central. Menshikov writes that "the enhancement of the economic role of the state is exerting a telling influence on the process of capitalist reprduction."[135] State-financed investments in social capital bring idle resources back into production, expanding the wage fund and creating new domestic markets. The distortions of the law of value have been corrected in part by Keynesian "automatic regulators," including progressive taxation and unemployment insurance, which impart a "spontaneous countercyclical impact" to the state budget.[136] While discretionary monetary and fiscal policies are seen to be less effective because of lags in design and implementation, Menshikov believes that state-monopoly capitalism has found the instruments to guarantee underlying economic stability.

Inherent in this new-found stability, however, is another contradiction. Confident of state support, monopolies frequently overfulfill their own "plans" and those of government policy makers. In the absence of

the traditional reserve army, organized labor bids up wages; and "the spontaneous consequences of these programmes necessitate periodic deflationary measures by the state" in order to reestablish profitability.[137] As in Marx's time, the source of crises is not underconsumption but variations in the rate of profit and investment: "It was already pointed out by Marx that economic crises set in not as a result of an absolute decrease in the incomes of the working class but after these incomes reach their temporary maximum. Crises are the . . . means for reducing the remuneration of the working class to a level at which a rise in the profit rate again stimulates the continuation of expanded capitalist reproduction."[138]

State-monopoly capitalism is seen as another phase in the process of capitalist organization—one less brutal and more sophisticated than the fascism of Preobrazhensky's day, but one that also retains capitalism's traditional contradictions. Most important among these is the fact that unemployment and paralysis of production continue to be periodically indispensable.[139] Calling for "restraint" and the scaling down of expectations, the modern state deliberately disemploys workers in numbers unprecedented since the 1930s, while simultaneously "bailing out" large firms on the pretext of "preserving jobs." Impairment of the traditional recovery mechanism can be seen in the fact that business leaders call for a "consumer-led recovery," yet at the same time demand "wage concessions" and curtailment of government assistance to all but themselves. Anxious to protect their existing fixed capital, corporations withhold new investment and proclaim that the responsibility for unemployment falls upon reluctant consumers and the working class in general.

The Decline of Capitalism was written in response to a similar argument: that wage "flexibility"—in a downward direction—was needed to overcome the Great Depression. Preobrazhensky refuted that contention with all the logical force he could draw from Marx's *Capital*. With due allowance for the change of time and circumstance, his conclusions retain their relevance in our own day. The role of the state may have changed, but the renewal and expansion of fixed capital remains now, as in the past, the precondition for recovery and sustained economic expansion, at least until the next cyclical crisis intervenes.

Notes

1. S. Menshikov, *The Economic Cycle: Postwar Developments* (Moscow: Progress Publishers, 1975), p. 15; cf. Karl Marx, *Capital* (Moscow: Foreign Languages Publishing House, 1961), Volume I, p. 620.

2. Menshikov, *op. cit.*, p. 17.
3. *Ibid.*, p. 21.
4. *Ibid.*, p. 19; *cf.* Marx, *Capital* (Moscow: Foreign Languages Publishing House, 1957), Volume II, p. 186.
5. E. A. Preobrazhensky, *The Decline of Capitalism*, pp. 5-6 below.
6. Menshikov, *op. cit.*, p. 238.
7. *Ibid.*, pp. 119-21; *cf.* Preobrazhensky, *Decline of Capitalism*, p. 19 below.
8. For the critical response to Preobrazhensky's work see Richard B. Day, *The "Crisis" and the "Crash": Soviet Studies of the West (1917-1939)*, (London: New Left Books, 1981), ch. 7.
9. Menshikov, *op. cit.*, p. 129.
10. *Ibid.*, p. 130.
11. *Ibid.*, p. 131.
12. *Ibid.*, p. 267.
13. Marx, *Capital*, I, pp. 631-2.
14. *Ibid.*, pp. 632-3.
15. Karl Marx, *Capital* (Moscow: Foreign Languages Publishing House, 1962), Volume III, p. 233.
16. *Ibid.*, II, p. 411.
17. *Ibid.*, III, p. 472; *cf.* p. 239.
18. *Ibid.*, II, p. 410.
19. *Ibid.*, p. 619.
20. *Ibid.*, III, p. 251.
21. *Ibid.*, II, p. 464.
22. *Ibid.*, p. 467.
23. Karl Marx, *Theories of Surplus Value*, trans. G. A. Bonner and Emile Burns (London: Lawrence & Wishart, 1951), pp. 353-4.
24. Marx, *Capital*, II, pp. 468-9.
25. *Ibid.*, p. 170.
26. Marx, *Surplus Value*, p. 355.
27. Marx, *Capital*, II, p. 76.
28. *Ibid.*, I, p. 633.
29. *Ibid.*, II, p. 315.
30. *Ibid.*, I, p. 763.
31. *Ibid.*, III, p. 118.
32. *Ibid.*, p. 478.
33. *Ibid.*, pp. 477-8.
34. *Ibid.*, p. 478.
35. *Ibid.*, pp. 232-3.
36. *Ibid.*, p. 428.
37. Quoted in E. Leikin, "Kautskiianstvo v Teorii Imperializma," *Pod Znamenem Marksizma*, XI (November 1926), p. 184.
38. *Ibid.*.
39. *Ibid.*, p. 183.
40. Rosa Luxemburg, *The Accumulation of Capital*, trans. Agnes Schwarzschild (London: Routledge and Kegan Paul, 1963), p. 348.
41. *Ibid.*, pp. 351-2.
42. Rosa Luxemburg, "The Accumulation of Capital: An Anti-Critique," in Rosa Luxemburg and Nikolai Bukharin, *Imperialism and the Accumulation of Capital*, trans. Rudolf Wichmann, ed. Kenneth J. Tarbuck (London: Allen Lane—The Penguin Press, 1972), p. 57; *cf. Accumulation of Capital*, pp. 334-5.
43. Luxemburg, *Accumulation of Capital*, p. 132.
44. Luxemburg, "Anti-Critique," pp. 54-5.
45. Marx, *Capital*, II, p. 492 *et seq.*

46. *Ibid.*, p. 498.
47. Luxemburg, *Accumulation of Capital*, p. 339.
48. *Ibid.*, pp. 340–1.
49. Marx, *Surplus Value*, p. 359.
50. *Ibid.*, p. 358.
51. *Ibid.*
52. Preobrazhensky, *Decline of Capitalism*, p. 83 below.
53. *Ibid.*, p. 70 below.
54. *Ibid.*, pp. 89–90; *cf.* p. 17 below.
55. V. I. Lenin, *Collected Works* (45 volumes), (Moscow: Progress Publishers 1972–4), Volume I, pp. 498–9.
56. *Ibid.*, III, p. 66.
57. *Ibid.*, II, p. 167.
58. *Ibid.*
59. *Ibid.*, p. 168.
60. *Ibid.*, III, p. 58.
61. V. I. Lenin, *Selected Works* (3 volumes), (Moscow: Foreign Languages Publishing House, 1960), Volume I, pp. 759–60.
62. Preobrazhensky, *Decline of Capitalism*, p. 50; *cf.* p. 56 below.
63. Rudolf Hilferding, *Finance Capital*, trans. Morris Watnick and Sam Gordon, ed. Tom Bottomore (London: Routledge and Kegan Paul, 1981), p. 225.
64. *Ibid.*, p. 228.
65. *Ibid.*, p. 230.
66. *Ibid.*, p. 315.
67. *Ibid.*, p. 318.
68. *Ibid.*, pp. 241–2.
69. *Ibid.*
70. *Ibid.*, p. 242.
71. *Ibid.*, p. 257.
72. *Ibid.*, pp. 264–5.
73. *Ibid.*, p. 262.
74. *Ibid.*, p. 263.
75. *Ibid.*, p. 298.
76. *Ibid.*, p. 234.
77. *Ibid.*, p. 235.
78. *Ibid.*, p. 296.
79. *Ibid.*, p. 367.
80. *Ibid.*, p. 334.
81. *Ibid.*, p. 362.
82. Lenin, *Selected Works, I*, p. 719.
83. Hilferding, *op. cit.*, p. 336.
84. N. I. Bukharin, *Selected Writings on the State and the Transition to Socialism*, trans. and ed. Richard B. Day (M. E. Sharpe, 1982), p. 29.
85. *Ibid.*, p. 25.
86. *Ibid.*, p. 22.
87. *Ibid.*, p. 31.
88. *Ibid.*, p. 23.
89. *Ibid.*, p. 51.
90. *Ibid.*, p. 40.
91. *Ibid.*, p. 51.
92. Karl Marx, *The Poverty of Philosophy* (New York: International Publishers, n.d.), p. 128.

93. Lenin, *Selected Works*, I, p. 781.
94. *Ibid.*, p. 806.
95. Lenin, *Collected Works*, XXXI, p. 236.
96. *Ibid.*, XXIX, p. 165.
97. V. I. Lenin, *O Programme Partii* (Moscow: Gosudarstvennoe Izdatel'stvo Politicheskoi Literatury, 1959), p. 286.
98. Preobrazhensky, *Decline of Capitalism*, p. 37 below.
99. *Ibid.*, p. 38 below.
100. *Ibid.*, p. 43 below.
101. For Preobrazhensky's view of Soviet domestic policy see E. A. Preobrazhensky, *The Crisis of Soviet Industrialization*, ed. Donald A. Filtzer (M. E. Sharpe, 1979); E. Preobrazhensky, *The New Economics* (London: Oxford University Press, 1965); Richard B. Day, "Preobrazhensky and the Theory of the Transition Period," *Soviet Studies*, 28 (1975); Day, "Trotsky and Preobrazhensky: The Troubled Unity of the Left Opposition," *Studies in Comparative Communism*, X, 1-2 (1977); Day, "On 'Primitive' and Other Forms of Socialist Accumulation," *Labor/Le Travailleur*, 10 (Autumn 1982); Day, *Leon Trotsky and the Politics of Economic Isolation* (London: Cambridge University Press, 1973), esp. ch. 6; Day, "Socialism in one Country: New Thoughts on an Old Question," *Pensiero e Azione Politica di Lev Trockij*, ed. Francesca Gori (Firenze: Leo S. Olschki, 1982), 311-30; for Bukharin's critique of Preobrazhensky and the Left Opposition, see *Selected Writings*, esp. pp. 151-82.
102. Preobrazhensky, *The New Economics*, p. 151.
103. *Ibid.*, p. 153.
104. *Ibid.*, p. 154.
105. *Ibid.*, p. 157.
106. *Ibid.*, p. 156.
107. Preobrazhensky, *Decline of Capitalism*, p. 107 below.
108. *Ibid.*, pp. 171 below.
109. *Ibid.*, pp. 174 below.
110. *Ibid.*, pp. 175 below.
111. For Soviet reactions to fascism see Day, *The "Crisis" and the "Crash,"* ch. 8.
112. G. Roginsky (ed.), *Zakat kapitalizma v trotskistkom zerkale* (Moscow: Partiinoe Izdatel'stvo, 1932), pp. 57-8.
113. For Trotsky's writings in exile on the Soviet economy see Day, *Leon Trotsky*, ch. 8.
114. Preobrazhensky, *Decline of Capitalism*, p. 176 below.
115. For Bukharin's assessment of Stalinism see *Selected Writings*,
116. For a full discussion of Varga's Law see Day, *The "Crisis" and the "Crash,"* ch. 5.
117. Marx, *Capital*, I, p. 629.
118. Luxemburg, *Accumulation of Capital*, p. 336.
119. Preobrazhensky, *Decline of Capitalism*, p. 54 below.
120. Marx, *Capital*, III, p. 472.
121. E. Varga, *The Decline of Capitalism* (London, 1928), p. 9.
122. E. Varga, *Problemy mirovogo khoziaistva i mirovoi politiki* (Moscow: Izdatel'stvo Kommunisticheskoi Akademii, 1929), p. 49.
123. *Ibid.*, p. 50.
124. *Ibid.*, p. 54.
125. E. Varga, *The Great Crisis and its Political Consequences: Economics and Politics, 1928-1934* (London: Modern Books, n.d.), p. 15.

126. *Ibid.*, p. 19.
127. *Ibid.*, p. 23.
128. *Ibid.*, pp. 73–4.
129. *Ibid.*, p. 76.
130. Preobrazhensky, *Decline of Capitalism*, p. 19 below.
131. *Ibid.*, p. 10 below.
132. *Ibid.*, p. 19 below.
133. *Ibid.*, p. 39 below.
134. Luxemburg, *Accumulation of Capital*, p. 454.
135. Menshikov, *op. cit.*, p. 150.
136. *Ibid.*, p. 158.
137. *Ibid.*, p. 183.
138. *Ibid.*, p. 220.
139. *Ibid.*, p. 219.

The Decline of Capitalism

PREFACE

The present work represents a portion of a larger project dealing with contemporary imperialism and its downfall. I am giving the reader advance notice of this fact mainly in order that impossible demands will not be made of this book, demands that it is unable to satisfy by virtue of the distribution of material between the separate parts of the project.

My work on contemporary imperialism can be divided into the following principal components:

1. An historical characterization of imperialism as a whole. (The production relations of early capitalism, of classical capitalism, and of capitalism in the stage of imperialism. Evolution of the forms taken by the bourgeois state: The feudal-bourgeois form of state, Bonaparatism, bourgeois democracy, and fascism. The evolution of the entire superstructure of capitalism.)

2. The production relations of postwar imperialism. (Changes in the structure, being connected with monopolism. Changes in the reproduction process and in the character of crises. Marx's theory of reproduction and crises and its application to our own day. An investigation of the crisis of 1930–1931. Changes in the system of exchange and in the credit system. The contradictions of imperialism as a whole and the system in its entirety.)

3. A characterization of the most important capitalist countries and their role in the world economy since the war. An analysis of the principal phenomena in the concrete history of the postwar world economy. The USSR and the capitalist world. The preconditions for organization of the socialist economy of Europe and the socialist economy of the world.

In view of the pressing immediacy of questions relating to the current world economic crisis and to crises in general under imperialism, I have separated from the larger project and quickly worked up those parts which deal with the reproduction process, the economic cycle

and crises under both free competition and imperialism, along with an investigation of the current world crisis. In other words, I have selected a few chapters from the economic portion of the project. From the study of the evolution of bourgeois state forms I have furthermore taken the chapter on fascism and, in part, the theme of the mutual relations between the USSR and the capitalist world. Thus the present work was composed by combining these materials with the first chapter, which constitutes a general, introductory essay. Because of this division of the material, the reader will not find in the book either a general social characterization of imperialism or an analysis of *all* of its contradictions. Nor does the book contain an analysis of the credit system, the circulation of money, the dynamic of world prices, and much else that is important to the project as a whole but could be omitted from the present version in order not to delay its publication.

I consider publication of this book to be useful for the following reason.

In the recent past not only our philosophy, but also our economic science has been rather seriously threatened by the danger of being transformed into a skeleton of methodological bones. Although this danger has been overcome for the moment, now there is a risk of falling into the opposite extreme: in the majority of works devoted to the world crisis and its associated general theoretical problems, heaps of statistical data are being mechanically thrown together with twenty or thirty quotations from our teachers. The same quotations are used repeatedly, without any understanding of how they might be scientifically employed for an evaluation of new facts. There is, moreover, a shocking poverty of new research into the central questions, such as the character of the reproduction process and the change of the economic cycle under imperialism, as compared to the epoch of free competition. Obviously, what has been published thus far on this theme cannot be taken to be representative of all the work now being undertaken and prepared for publication by our economists. I understand that genuine science is a very labor-intensive crop with a very long "gestation period." But on the other hand, life, too, is now advancing too quickly. One must make haste in every area of work. And that is why I decided to hurry and to provide something of my larger work on postwar imperialism for discussion by readers and researchers. In addition to the other problems already mentioned, this book also leaves out a polemical chapter. In that chapter I address a number of errors committed by certain of our economists—beginning with Comrade Bukharin—on the question of

the economics of imperialism. In the same chapter I consider the work of Sternberg, Grossman, Otto Bauer, Kautsky, Fried, and others, and I also include mention of the inadequacy of some superficial observations on imperialism which occur in my own works.

In order to avoid purely terminological misunderstandings, let me add that I sometimes use the word "monopolism" in place of "the economic structure of imperialism." I do so in full accordance with the terminology of Lenin, who spoke of "monopolism" as "imperialism" with reference to its economic character.

E. A. Preobrazhensky

PART ONE

1. The Economic Crash of Capitalism

The distinguishing feature of the postwar capitalist economy is its enormous volume of unused fixed capital and the monstrous extent of absolute unemployment. With the development of the world economic crisis the amount of idle capital and the number of unemployed workers have reached shocking limits. Every economist who wishes to understand what is happening in the capitalist system faces one fundamental question. Why is it that capitalism, at the present stage of its development—or more properly, of its decay—is unable by the usual market methods, that is, on the basis of the regulating activity of the law of value, to absorb into the production process this unemployed labor power and these idle means of production? What has happened to the very mechanism of capitalist society to deprive it of the ability to move from one cycle of expanded reproduction to another, as it used to do in the epoch of free competition?

In its attempt to solve this problem bourgeois economic science has demonstrated its complete bankruptcy; it has proven incapable even of framing the question. Its greatest luminaries have failed in their prognoses and have turned out to be incapable of explaining the current crisis. For the moment they are remaining stubbornly quiet with respect to the immediate future, fearing that they will discredit themselves a second time.

Only Marxist economic science is capable of providing correct answers to these questions.

Relying upon Marx's theory of reproduction and the Leninist theory of imperialism, and analyzing the conditions of expanded reproduction in monopolistic capitalism, I shall endeavor to answer these questions and to provide a theoretical analysis of the causes of the present world crisis.

In every system of social reproduction there exists a specific form of link between the productive forces, which are allowed sufficient room to develop, and the whole aggregate of production relations in the given formation.

One of the specific features of the capitalist system is the fact that separate capitalist enterprises, as a general rule, must either produce and secure surplus value for themselves, or else they must acquire through redistribution such a share of the surplus value of the entire capitalist class as will secure for each enterprise the average norm of profit. If there is no profit the existence of the capitalist enterprise, as a *capitalist* enterprise, makes no sense; and that is true regardless of whether the enterprise is needed by society and even regardless of whether its existence is of benefit to the entire class of capitalists. This is the essential difference between a capitalist enterprise, and, for example, a natural, manorial economy. A natural, manorial economy can hang on so long as it is assured any portion whatever of the peasant's surplus product, and so long as feudal exploitation provides any results whatever. But for a capitalist enterprise, in contrast, and for exploitation of the capitalist type, much more complex preconditions are required. From this viewpoint one could say that, although the capitalist economic system is much more elastic than feudalism in all other respects, in this particular respect, which entails the dependence of the real utilization of society's available productive forces upon a defined rate of profit for each average enterprise, this system is in fact more vulnerable. At a certain stage in the development of the productive forces of capitalist society, and with the strengthening of unfavorable processes for such development in the system of capitalist distribution, it is precisely in this connection that there emerges a log-jam which brings to a halt the entire economic development of society.

The apologists of capitalism, including Kautsky, see no limit to the development of capitalist production. In his work *Materialistische Geschichtsauffassung*, Volume II, Kautsky declares that he sees no reason why capitalism might find itself in a blind alley and enter into a period of general, chronic crisis. He casts doubt upon and considers unproven Marx's famous view that at a certain stage of development capitalist monopoly of the means of production becomes an obstacle to development of society's productive forces and must be blown apart.*

What is now happening on the scale of the entire world capitalist economy is the clearest and most striking illustration of Marx's view.

*An asterisk in the text indicates that the reader should refer to the Editor's Notes, pp.202–04.

The time is long gone when crises were only the low points on a rising curve of capitalist production. The time is gone when the reserve army of industry served as a supply of labor power in the event of a great cyclical development of industry, and when this labor power was drawn almost without exception back into the production process with the onset of economic expansion. Likewise, the time is gone when reserves of fixed capital, for the most part, served this same purpose: such reserves used to furnish capitalism with the ability to satisfy quickly a growing demand in the period of recovery, and to do so without resorting to construction of new enterprises, whose output might only be expected to appear after the period of expansion had already ended. The other purpose of these reserves was to make it easier to surmount disproportions between separate branches of production and to avoid frequent redistribution of capital from one branch to another, capital that was already tied up in a certain natural form.

Within these limits both the reserve army of labor power and reserves of fixed capital were functionally necessary to capitalism, whose development proceeded spasmodically. Today capitalism creates not a reserve army of labor power, but the army of the unemployed, who are thrown out of the production process forever; that is to say, absolute unemployment, which signifies the immobilization of an ever-growing portion of society's labor power.[1]

Just how far this whole process has advanced can be seen from the following figures pertaining to the volume of unused equipment in ferrous metallurgy.[2]

In England, of 427 blast furnaces in existence, 141 were operating in June 1928 and 105 in July 1930.

In the USA, of 343 blast furnaces, 130 were operating in June 1928. And in Germany, of 170 blast furnaces, 103 were functioning in June 1928, 74 in August 1930.

These figures indicate that the structure of capitalism, even before the crisis, was such as to bar the way to utilization not only of potential but also of the existing productive forces of society. Even before the development of the present crisis capitalism failed to make use of a significant portion of its production apparatus and of society's labor power, and this was especially true of the apparatus of heavy industry, which expanded during the war. Now, at the moment of crisis, the immobilization of capital has grown to unheard-of dimensions, and more than 30 million workers have been indefinitely thrown out of the production process.

The question arises as to why capitalism, on the basis of the normal

operation of its entire mechanism, cannot employ these 30 million, who would create an enormous sum of new surplus value and an enormous supplementary market, both for means of consumption and for the production requirements of industry itself, of agriculture, and of transportation.

The fact that Kautsky does not even pose this question (in the book referred to earlier) testifies to his complete bankruptcy as a theoretical economist. Throughout tens of pages he describes for us capitalism's superiority over precapitalist forms of economy, something with which we have long been familiar, but he completely avoids the most acute question of our time, a problem which confronts not only every proletarian but also the capitalist classes, frightened as they are by the dimensions of the crisis.

Let us attempt to answer this question.

For the expansion of production capitalism does not lack the required means, including materials, although conditions vary between branches. All the means of production are available in abundance; indeed, it is this very abundance, presently immobilized, that constitutes the most important element of the current crisis. As for working hands, if we take into account the many millions of potential workers who have never been absorbed into the production process due to economic stagnation in most capitalist countries, then we shall see that the excess here is far greater than the 30 million who now find themselves out of work. Likewise, the monetary and credit system of capitalism, prior to the current crisis, was sufficiently flexible to avoid causing insurmountable difficulties, even though supporters of the quantity theory of money assert the contrary to be true (without any proof). What is the explanation?

The common answer is that there are inadequate markets for the development of production.

But just what is a market from the viewpoint of theoretical economics?

The market represents the total of society's effective demand both for means of production and for articles of consumption; that is, on the one hand, the total demand of the economy's production apparatus as a whole, on the other hand, the total demand of individual consumers. Taking the entire process of production and consumption as a whole, Marx quite correctly considered consumption in capitalist society to be a function of production. He took the view that in a capitalist economy there does not and cannot exist any other demand but effective demand, or demand which is predetermined by the limits of the previous cycle of

reproduction and by the volume of productive accumulation.

Suppose capitalist society successfully resolved the task of attracting the entire current army of unemployed into the production process, as well as utilizing all of the equipment that is now idle. In that case there would appear an additional market for articles of consumption, resulting from the fund of wages going to tens of millions who were previously unemployed. There would also be an increased demand from the many millions of small producers, who could now sell their production without difficulty to the capitalist countries and who, *for that very reason*, would now be able to purchase both means of production and articles of consumption from the capitalist sector. On the other hand, once capitalist industry was itself working at full capacity, it would create an enormous supplementary demand for all the means of production. It is true that such a great leap in the development of production could not directly take the form of an arithmetic production increase on the part of all countries in the world economy. Such an increase of production would lead to a distribution of the productive forces different from the one we have now. Some branches would work at less than capacity, others would not be able to satisfy the market demand; some countries would exceed previous years of record economic development, others would not use their whole productive power. But that is another question. The basic fact is that expanded reproduction, throughout the world economy as it now exists, would itself resolve the problem of the market—even if the condition of separate branches of production or individual countries were to vary.

What is it that prevents world capitalism from making the transition to this higher level of expanded reproduction? Why was it that in 1929, when it already possessed an enormous volume of unemployed labor power and unused equipment, capitalism moved in 1930 not into expanded reproduction, but rather into catastrophically declining reproduction which bears no resemblance to the cyclical contraction of reproduction during prewar crises?

It is perfectly obvious that the answer must be sought in the structural peculiarities of capitalism as a specific historical form of production, more particularly, in those places where the structure of the social formation either curtails or allows for a disproportionately slow development of capacity in relation to society's new productive forces. Later we shall see that the answer must be sought not so much in this general formulation as in an investigation of that arresting influence which the monopolistic system imposes upon the development of expanded reproduction.

Let us analyze the question in more detail from this point of view.

Expanded reproduction in every new cycle begins with the allocation of additional means of production and of new, additional means of consumption—going to the reproduction of supplementary labor power—between different branches and different national economies. In its first phase this allocation is brought about, under capitalism, by the system of capital issues. New joint-stock companies are created; the existing enterprises and associations, including industrial-banking associations, issue new shares; the transportation enterprises issue new securities, and so forth.

How are these movements regulated on the capital market?

Capital moves in those directions where it expects to find either the maximum or else a stable and secure profit; it avoids those parts of the economy where it cannot acquire the average rate of profit, or still worse, where production for the moment yields virtually no profit whatever.

Now let us enquire whether this movement corresponds to the directions in which the flows of new capital would have to occur if the objective task of the entire distribution of new investments were to be expanded reproduction on the scale of the entire world economy, with a corresponding expansion on the scale of the national economies.

By way of an answer let us take a concrete example from the contemporary economy of England, a country that is especially interesting for us in this connection because it is the one in which the process of immobilizing the economy's fixed capital and labor power is furthest advanced. The oldest and most important branch of heavy industry in England is the coal industry, which is technologically very backward and in need of colossal capital investments in order to lower the costs of production and raise the output of coal. It is enough to survey the distribution of capital issues in England during the past 10 years in order to become convinced that new English capital persistently moves in exactly the opposite direction.[3] These enormous capital investments, which are absolutely necessary in England's coal industry in order both to expand production and to ensure the competitive ability of English coal abroad, are unattractive from the viewpoint of acquiring profit today. Thus capital avoids this sector, into which it would have to move *before all others*—if the question were decided from the viewpoint of the capitalist class of England as a whole. What this fact demonstrates is that the very system of distributing new issues by way of the market is absolutely outmoded and prevents the full and most beneficial use of productive forces even from the viewpoint of developing the capitalist

economy itself. In order to distribute productive forces on a modern scale, in a condition of profound economic interconnections in the world as a whole, what is required is a completely different and completely non-market system of distributing accumulated capital, together with different methods of concentrating these accumulated values and a different direction for their disposal.

But let us, for the moment, make an unrealistic assumption. Let us assume that English capitalism, following the recipe of Mosley and his group, were to create a government of five ministers with dictatorial powers of control over the economy. What is even more fantastic, let us further assume that this government acquires the power to dispose of all the capital that is lent in England each year, throws it into reconstructing the coal industry, rationalizes production without regard for the private property of the coal owners, and thus makes English coal cheaper than that in other countries. What would be the result?

If everything remained unchanged in the other countries, new markets would be secured for English coal. But this would lead to a further immobilization of capital and labor power in the other coal-mining countries. Thus we would end up merely with a redistribution of unemployment and unused capital in the world economy.

That fact, in turn, demonstrates that the process of creating a single world economy has advanced so far that a transition to rapidly expanding reproduction in all countries requires adoption of another system of capital issues; capitalism would have to go over to a system of planned economy, one that would begin not with the effectiveness of investments from the viewpoint of acquiring profits today, but would be guided instead by the optimum development of production in all countries that are connected with each other by way of production. Capitalism and a planned economy are, however, incompatible. Capitalism might well find itself in a blind alley and begin to have need of a planned economy, but a planned economy has no need of capitalism. We see, therefore, just how far capitalism has already matured for the socialist revolution.

But what is meant by the contradiction between the market system of allocating new capital and the level of development of the productive forces? The whole system of allocating capital is integrally connected with the capitalist system in its entirety; it represents only one side, one aspect of the activity of the law of value as the regulator of social production under capitalism. If English capitalism is not in a position to use market methods in redistributing profits from new and successful branches of industry, together with profits from capital investments in

the colonies, in order to finance the old industrial branches, then we can turn this thesis around and say the following: such an unfavorable distribution as now exists is dictated by the law of value in the form in which it appears under monopolistic capitalism. Hence the aforementioned contradiction means that we are dealing here with another contradiction, one even more profound—a contradiction between the entire system of regulation through the law of value on the one hand, and the current level of the productive forces and their world distribution on the other. A thrombosis has occurred both here and at a number of other points; for example, the decline of the wage fund, the increase of nonproductive consumption in bourgeois society, etc.

When we point to the contradictions that exist between the productive forces of contemporary capitalism and the system of new issues, what we do, so to speak, is socialize the capitalist economy in our mind: we reveal this contradiction by comparing capitalism to that form of economy which must replace it and which will fully utilize the existing productive forces. It is important to demonstrate not only the cause of irrationality in the system of capital investments under monopolistic capitalism, but also the cause of the arrested growth of production and thus the physical limitation imposed upon new capital investments.

This question arises automatically. If it is true that at the *present* stage of development of the productive forces, the existing form of organizing production and distribution creates insurmountable obstacles to the new use of these productive forces, it is also true that in the previous stage of capitalism's development, in the period of free competition, matters were different. Let us now ask ourselves: what are these new difficulties that monopolistic capitalism creates for expanded reproduction? How is capitalism in the stage of imperialism different in structure from capitalism in the epoch of free competition, and what is the effect upon expanded reproduction? What remains unchanged and what is new?

The basic structural feature of the capitalist form of production, as production in the market for the sake of profit, remains unchanged. Only vulgar apologists of capitalism fail to see that even in the heyday of classical capitalism this structural feature was the main obstacle both to development of society's productive forces and to the most rational use of productive forces already at hand. In the classical period, however, this Achilles heel of capitalism was not so significant, and its retarding influence upon economic development was mitigated for two reasons.

The first reason was the fact that capitalism, at that time, was more elastic and flexible: the concentration of capital was still relatively unimportant. The majority of enterprises were not yet amalgamated into associations; and the creation of new enterprises was easier because, with the existing level of technology, much smaller investments of capital were required. The establishment of new enterprises was especially pronounced in the period of expansion. This partisan style of advance, this movement in the direction of a steady increase of production, calculated upon expanding production in related branches, led, it is true, to the organization of many unnecessary enterprises, which were either liquidated in periods of crisis or were not used to capacity. But at the same time this form of movement made it possible to establish accurately (although not in advance) the production possibilities of capitalism at its given stage of development and within the limits of its effective demand. Pursuit of profit and the distribution of new capital with reference to the immediate conjuncture led, at that time too, to a waste of productive forces due to ignorance of the market and of demand prospects in the long run. But then the creation of new enterprises met with few significant obstacles, and the inexpedient distribution of capital and labor power turned out in any event to be better than allowing both to lie completely idle. Although certain new enterprises proved later to be redundant, at least they did help production to develop in all the other enterprises dependent upon them. In the context of this general advance there was also a guarantee that enterprises that were not operating at capacity today, or even became temporarily redundant, would still be drawn permanently into the production process tomorrow. In summary, one could say that this ease of establishing new enterprises, and all this partisan style of advance, overcame the internal structural obstacles to development of the market that are part of the very nature of bourgeois production, as production for profit—a system in which social needs are satisfied not in accordance with the availability of means of production and labor power, but only to the degree that the owners of capital are satisfied with a certain norm of profit.

In the stage of monopolism, by way of contrast, capitalism has less flexibility. The founding of new enterprises becomes extraordinarily difficult for two reasons: as a result, on the one hand, of the enormous rise of the organic composition of capital in the most important branches of industry, and on the other hand, as a result of the existence of enormous monopolistic associations, which frequently kill off their competitors even before their birth. The presence of enormous

associations, outgrowing market methods of distributing new productive forces and even the frontiers of separate national economies, creates a condition in which regulation of production on the basis of the law of value is accompanied by a progressive reduction of the positive consequences of such regulation and an intensification of its negative consequences. If additional demand appeared in the market during the epoch of free competition, it led not only to expansion of production in existing industries, but also to the rapid organization of new ones, whose builders, so to speak, anticipated a future expansion of all production and of all types of productive and consumer demand. Both in the period of construction and as they developed their operations, these new enterprises increased the demand available to other branches and enabled the whole chain of production to move one step forward. Under monopolistic capitalism the process is limited to expansion of production in existing enterprises or resumption of operations by backward enterprises, temporarily held in storage. The stimulating effect of growing demand upon expanded reproduction turned out, therefore, to be more pervasive in the epoch of free competition.

The influence of monopolism is even more negative, however, when there occurs an absolute or even a relative reduction of effective demand. In the period of free competition the most acute reduction of demand occurred at the time of a crisis. In this instance the strongest and most viable enterprises undertook reconstruction on a new technological basis and adjusted to the decline of prices. As a result, the same sum of effective demand was satisfied by a greater quantity of commodities in kind, a fact that weakened the action of the crisis in what is called Department II, while technological reconstruction, on the other hand, restrained the curtailment of production of means of production. In both respects the condition of crisis, that is, principally, the reduction in number of productively employed workers, encountered limits in the very system of free competition. Under monopolism a curtailment of demand most frequently results in curtailment of production. Adjustment to the new situation is achieved not by lowering prices and replacing fixed capital, but by artificially reducing supply, which involves immobilizing a part of society's capital and labor power. From this point of view monopolism, given the existence of the profit category as the immediate stimulus for production, is a constant source of thrombosis in the development of society's productive forces. In this case, moreover, the quest for profit becomes, with increasing frequency, a stimulus for curtailment of production rather than for its expansion. Such a thrombosis not only strikes at those branches ruled

by powerful trusts and syndicates, but also spreads to all the branches producing materials and means of consumption, whose main market for sales is located in large-scale industry and its working population. Today's quest for the greatest profit leads to contraction rather than expansion of production and thus makes it difficult for capitalism, through drawing the maximum labor power into production, to guarantee that tomorrow there will occur an enormous growth of surplus value for the class of capitalists and an increase of the volume of products being produced for the whole of society. The capitalist form of distribution, more than ever before, turns out to be a structural obstacle to society's progress. It is precisely here that one finds the main cause of the decay of contemporary monopolistic capitalism, and it is precisely in this respect that it has completely outlived itself in economic terms. The continued existence of capitalism is becoming an enormous threat to mankind because it cannot, on the one hand, control the powerful productive forces of today's economy, and because in its search for a way out of the impasse, on the other hand, it is beginning to destroy one part of the world capitalist system in military conflicts in order to save another part. An imperialist policy and imperialist wars grow with iron necessity out of such a state of affairs. Only the proletarian revolution can save mankind from bloody new wars, for the proletarian revolution will at once both eliminate the need to adjust the utilization of productive forces to the level of the average norm of profit and place these forces directly in the service of satisfying society's needs. Production will then be limited not by the obsolete form of capitalist distribution, but only by the availability of means of production, labor power, and natural resources in the land.

Another less important but still essential difference between the conditions of reproduction in the epoch of free competition and those under monopolistic capitalism lies in the fact that the areas into which capitalism can expand are becoming steadily more confined. Rosa Luxemburg raised the question of the difference between reproduction in conditions of pure capitalism and reproduction in conditions where capitalism has a broad periphery of small-scale production. However, her entire book, excellent as it is in separate parts, was given more to expressing the presentiment of a problem than to giving a proper formulation of the question itself. The answer which she gave to the question was entirely incorrect.

Without dwelling upon this point in the present context, I would like only to say the following. The presence of economic territories for new expansion does not resolve the problem of realization in the manner

understood by Rosa Luxemburg, with her idea of absolute overaccumulation. Small producers, once drawn into commodity circulation, are in a position to make purchases because they are also in a position to sell materials and means of consumption to the capitalist countries. And if they continue in these circumstances to accumulate in the form of money, something that is completely inevitable in the case of the well-to-do strata of small-scale producers, then they will sell a certain part of their production without buying. New markets were important in the spheres of small-scale production that were newly drawn into the capitalist turnover, but in a different respect. They imparted greater elasticity to the capitalist system in terms of the dynamic of expanded reproduction primarily because they temporarily eased the disproportion arising within the capitalist segment of the world economy. By itself, and in terms of its absolute volume, trade with the colonies plays an incomparably more modest role than trade between the capitalist countries proper, a fact frequently demonstrated by world trade statistics. Rapid industrialization of the colonies could create for heavy industry in the capitalist countries such an enormous increase of demand for means of production as to mean that the economic reconstruction of the colonies would erase the whole of present-day world unemployment; it would probably create a shortage of working hands even in a country such as England. It is enough just to contemplate the prospect of rapid industrialization of such vast countries as India or China. But this problem cannot be solved by capitalism, only by a socialist regime, after the proletarian revolution: in their quest for today's profit and their instinctive fear of the prospect of rapid industrialization in colonies that would become their competitors, the pirates of monopolistic capitalism are barred, and in part bar themselves, from the path of resolving this problem in a capitalist manner. Thus they cannot break through to that higher level of reproduction that will be reached immediately by a socialist regime, a regime that will establish economic ties with all the backward countries on the basis of new principles, the principles of socialist cooperation. Private property in the means of production, given the monopolistic organization of production, creates an insurmountable structural barrier to this process.

It follows that if the opening of new territories played a role in the process of realization for developed capitalism, it did so not by virtue of the absolute significance of these territories in capitalist trade, but rather because, in the final analysis, the expansion of markets in the colonies enabled the market for capitalism—located within capitalism itself—to expand to an incomparably greater extent. The transition of

capitalism as a whole to the next level of expanded reproduction signified an increase of capitalist demand for the production of the capitalist countries themselves, and this expanded demand was tens of times larger than the additional demand originating in the newly opened markets. In order to clarify this thought I shall take the liberty of making a comparison. When a man is climbing up a steep ascent and carrying a heavy burden on his shoulders, it becomes important for his progress that he pause for a second, between levels, on some small landing. Although he will not tarry, but will move with both feet to the next level of the ascent, in the dynamic of his movement this small landing can play a significant, even if only a subordinate role. The same holds true of new markets in backward countries during the epoch of free competition. They were important not by virtue of their magnitude, but because they made it easier for capitalism to drag the accumulated productive forces to the next level of expanded reproduction, and thus they opened up an incomparably more powerful demand within capitalism itself. In that manner they alleviated the basic structural contradiction of capitalism, enabling it to set new productive forces in motion with gracious permission from the average norm of profit.

In the period of monopolistic capitalism, on the contrary, the entire world is divided; all the colonies are distributed and all the spheres of influence secured, so that the enormous trusts can only snatch from one another existing markets and spheres for the export of capital. Their dumping of exports is but a convulsive attempt to pause for a moment upon that landing which in the last century was represented by the opening of new markets for capitalism. But dumping by capitalist countries within other capitalist countries, or within the spheres of influence of other capitalist countries, means that several feet are being crowded onto the small landing at one and the same time. The result is that no-one can continue the ascent, and the entire burdensome productive apparatus of monopolistic capitalism falls back again to the level that it was intended to leave behind. Not only that, but even if genuinely new markets were now to be opened up, the negative influence of the monopolistic form of capitalism on expanded reproduction is itself so great that this weak palliative could not provide serious assistance.

Summarizing our comparison of classical capitalism and imperialism with respect to the question of the mechanism of expanded reproduction, we come to the following conclusion. The quest for profit half a century ago was just as intensive as it is today. But at that time, that is, in conditions of free competition, in order to acquire this profit the most powerful capitalist enterprises were required to replace their

equipment. Thus they were able to maintain lower prices, with which they destroyed the more backward enterprises of their competitors. Today, under monopolism, the very same pursuit of profit compels the largest trusts to follow the line of least resistance—to curtail production when demand falls, to prevent price reductions, and in the case of growth of demand to raise prices, without resorting to reconstruction of the old enterprises and frequently by setting in motion backward enterprises held in storage. In these circumstances it frequently happens that new technological discoveries are not put to use because they are not profitable for capital. All of this creates a thrombosis for the productive forces: any transition throughout the world economy to a new cycle of expanded reproduction is rendered extraordinarily difficult (although that fact does not exclude such a temporary possibility for individual countries, most often at the expense of other countries). The result is that monopolistic capitalism, by virtue of its very structure, leads to the growing immobilization of society's capital and labor power, which in turn leads to the crash of the capitalist system, begining with the economic foundation of bourgeois society.

The apologists of capitalism have referred to the fact that in the final years before the crisis capitalism surpassed the prewar levels of production. But it is not this absolute increase of production, scarcely exceeding population growth and now disrupted by the crisis, that is of fundamental importance to a Marxist economist; rather what is important is precisely the disproportion between the existing (and still more the potential) productive forces of society and that part of them which is in fact being utilized by the capitalist system. It is enough just to raise the question in this way in order to become convinced that the immobilization of society's capital and labor power in the years since the war, and especially in the current world crisis, is creating an unprecedented relation between functioning and reserve equipment, and between employed and unemployed labor power, a relation that never before prevailed, even in the years of the greatest depressions and crises of classical capitalism. And it is this condition that serves as an external indication of the fact that capitalism has entered the epoch of its crash, that the capitalist integument is being burst by the pressure of those forces which cannot be utilized by the bourgeois system.

That is the factual state of affairs. The working masses are enduring enormous privation. The petit bourgeois strata of the population are being flung from one side to the other, and seeing no way out they hurl themselves from one charlatan's recipe for salvation to another's. The capitalist class itself looks to its own future with the greatest anxiety,

not knowing what tomorrow promises to bring. Disappointed by their own economists, who on the very eve of the crash promised them increasing "prosperity," they are, like some of the American bourgeoisie, turning to fortune tellers in order to acquire information from them as to when the crisis will end. Seized by a fever of armaments, capitalism is madly preparing for a new imperialist war which will yield nothing to bourgeois society except the bloody amputation of one part of the body of capitalism for the sake of another—unless it provokes the salvation of mankind in the proletarian revolution.

All the facts of our time incontestably demonstrate that capitalism is moving in the direction of intensifying to the extreme all of its contradictions, of carrying to the extent of absurdity all of its negative features. This type of development, possessed of its own iron logic, is not unknown to dialectics. Once they have been dislodged from the condition of a certain economic equilibrium, the capitalist countries follow a universal tendency towards fascism. On the other hand, all the gathering storm clouds of war demonstrate that capitalism will pass from the historical scene by opening fire with all its instruments of destruction, and by releasing upon its gravediggers all the poison gases that have been accumulating through its long years of decay. We are facing a struggle of unprecedented severity. The very gravest danger, threatening the destiny of society, is the possibility of this struggle being prolonged by the weak organization and insufficient revolutionary determination of the proletariat in several countries. (History has seen examples of the mutual destruction of two rival classes as the result of a parity of strength between them. To prevent such an outcome, it is imperative that the vanguard of the proletariat rise to the historical tasks of our time.)

The guarantee against such a prolongation of the struggle is the fact that the outer limits of the capitalist system have already been breached in the USSR: in the great battles that are forthcoming, the international proletariat can look for support to one of its detachments, which is already organized as a state.

And that is why support for the first proletarian state is the primary duty not merely of all proletarians, but of all people in general who do not wish to tie their destiny to a bankrupt system.

PART TWO

2. Expanded Reproduction and Crises under Free Competition: General Observations

In the previous pages we formulated the position that the organizational structure of monopolistic capitalism creates entirely unique difficulties for expanded reproduction. We demonstrated that the quest for the highest profit through expanding and cheapening production is here frequently replaced by pursuit of the maximum profit through curtailing production and supply. This change in the situation is so serious and has such important consequences that it can be formulated in more general terms: the monopolistic structure of capitalism so curtails—or perhaps it would be better to say, so distorts—the action of the law of value, that today this law can no longer regulate the process of reproduction as it once did in the epoch of free competition.

This position can best be demonstrated by a theoretical scheme of expanded reproduction in conditions of free competition and then under monopolism.

Let us take a numerical example to depict the scheme of expanded reproduction under free competition, abstracting from the ties between the national capitalist economy in question and the world market. Suppose the gross annual production is equal in value to 15 thousand, with capital being divided and the conditions of exploitation being maintained in a manner similar to Marx's familiar schemes in the second volume of *Capital*. By way of contrast with Marx's schemes, we shall introduce only one significant approximation to reality; we shall let the fixed capital be amortized not in a single year, but over ten years, with the consequence that besides small "c" we shall also

distinguish large "C," while the share of the fixed capital being amortized will be allowed to equal one-third of the entire constant capital reconstructed in the course of a year. So be it. In these circumstances our scheme, when production is divided between Department I and Department II, will assume the following form*:

I. 20,000C 6,000c (4,000c + 2,000c) + 2,000v + 2,000s = 10,000
II. 10,000C 3,000c (2,000c + 1,000c) + 1,000v + 1,000s = 5,000

With a norm of exploitation of 100% and a norm of accumulation equal to one-half of all the surplus value, we get the following picture. In the course of the year the amount of functioning capital in Department I (taking fixed capital as the sum of the annual amortization) is 6,000 + 2,000 = 8,000, while in Department II we have 3,000 + 1,000 = 4,000. The total movement of means of production during the year, from Department I into Department II, is equal in value to v + s/2, that is 2,000 + 1,000; while means of consumption move from Department II to Department I in the amount of cII, or 3,000, giving the following comparison between the two years.

First Year

I. 6,000c + 2,000v + 2,000s
II. 3,000c + 1,000v + 1,000s

Second Year

I. 6,750c + 2,250v + 2,250s
II. 3,375c + 1,125v + 1,125s

After the first year of working with such proportions surplus value of 1,000 is accumulated in Department I, 500 in Department II. If the level of capitalist consumption increases in correspondence with the distribution of all the other magnitudes, then the new year will have the following distribution of capital and capitalist consumption:

I. 20,000C 6,666c + 2,222v + 1,111s fund of capitalist consumption[4]
II. 10,000C 3,333c + 1,111v + 555s fund of capitalist consumption

Thus our example illustrates equilibrium in the processs of expanded reproduction; it is an ideal example even for the smoothest process of reproduction. In reality there are constant disproportions, of differing severity, leading on one occasion to depressed conditions in separate branches within the departments; on another occasion to more serious depressions, caused by significant disruptions of proportionality between production of means of production as opposed to means of consumption; and on still another occasion to such a development of production in both departments as to entail a disproportion betwen total production and the general level of social demand, or in other words, the outbreak of a general crisis.

Let us suppose that a significant disproportion of one kind or another does occur, and a crisis breaks out on the side of production of means of consumption. In our example this development might occur for several reasons, among them the following: if the composition of capital were lower in Department II than in Department I, and if vII were increased from the 1,000 in our example to 1,500, then means of consumption would be offered in exchange with Department I not in the amount of 3,333, but in a greater amount, say 3,440, as would be the case with capital in Department II of 3,000c + 1,500v, and with the same norm of accumulation.* The causes of disproportion in this case need not interest us further.

Let us now suppose that the crisis of overproduction arises in Department II under conditions of competition. How will it be overcome by the capitalist system?

As a result of overproduction Department II will offer 3,440 for sale during the year to Department I, whereas the effective demand of Department I for means of consumption is 3,333. The overproduction will not be great in this case, but that is not important. The first reaction to this fact in free competition will be to increase inventories, and then to reduce prices of means of consumption. If this reduction becomes general, the disproportion both within II and at the junction between Departments I and II will be dissolved. If effective demand remains unchanged with the reduced prices, then within II more commodities will be sold in natural form for the same total price. Likewise, more of them will be sold to Department I in response to the same demand of 3,333.

What will be the result in terms of the blockage in the entire process of expanded reproduction?

Department I does not suffer because its supply will be met by

additional demand from II, its wage fund will purchase more labor power, and the consumption fund of the capitalists will purchase more means of consumption. In this way the depression in II will even have a stimulating effect upon the expansion of production in I. This is the most crucial point, indicating no decline in the tempo of drawing new workers into production, workers whose labor alone creates new value and raises the level of real production within society.

In II, by comparison, it turns out to be impossible to increase the growth of "c" in a measure corresponding to the rate of accumulation which has been adopted. This condition must retard the speed of expanded reproduction in II. If the disproportion is not too great, the weaker enterprises will be bankrupted and the existing demand will be covered by the technologically more advanced enterprises, which will strengthen their position in the market and be able to reduce the costs of production by technological improvements. Consequently the amount of labor power used in II will be relatively less, or more accurately, the growth of the number of workers will take place more slowly once the realization of production going to Department I encounters an obstacle. But the volume of products being produced *in natura* will be greater than would have been the case if prices had remained unchanged and if II had expanded from the outset in proportion to the scheme in I. Department II will have lost a certain portion of its capital, but only in value as opposed to natural terms, and this loss will have been partly taken up through the growth of consumption so long as the capitalists are not quick to lower wages in correspondence with the reduced cost of living. Another part of this capital will have been relocated in I, which with the same nominal v will now be able to purchase more labor power. On the whole Department I will receive more means of consumption for the same amount of money.

From the viewpoint of society as a whole, therefore, the following outcome prevails. In Department I development proceeds normally, with a tendency towards even more expansion than was previously the case, due to the stimulating transfer of a portion of values from II. In II the tempo of development slows down, and the number of workers grows more slowly than would have been the case had the momentum of accumulation found support in a growing market in I and in the growth of supplementary means of production, which might pass over into II. Here a relatively smaller number of workers produces the same volume of commodities, as required by the law of production proportionality with Department I.

Consequently, there was a disproportion; and it led to a transfer of capital from II into I, to a temporary increase of consumption by the workers, to an increased growth tendency in the production of I, to a reduced tempo of growth in II—*without any decline of the volume of commodities* being produced in II *in natura*—and to a fall of prices along with the ruin of old enterprises and an improvement of technology. A certain portion of values would perish in this process if they existed in a natural form not permitting long storage (perishable goods, etc.). But the real loss for society is the less than complete utilization of labor power in II.

If such a depression were to originate in I, and if Department I could only sell 3,333 means of production to II, having produced, say, 4,000, then in this case the resolution of the disproportion in conditions of free competition would occur in exactly the same way, the only changes being those resulting from the different natural composition of production in I. In this case too prices would begin to decline. For II this price decline would have an even more stimulating effect than that exerted upon I, in the previous example, by the reduction of prices in II.

If Department II's effective demand is now 3,333, that is, a demand corresponding to the volume of production and expansion of its constant capital, then with a price reduction for products in I, let us say by 5%, Department II will be in a position to purchase 5% more means of production in natural form for the same sum. And since all accumulation requires more to go into constant than into variable capital, such an increase of II's means of production at I's expense, because it does not, as in the previous case, increase consumption by the workers, can go entirely into II's fund for expanded reproduction. In I itself there will occur the same "purge" of weak enterprises as before, and part of the means of production, being redundant from the viewpoint of II, will go to improving I's own equipment, assuming their natural form makes this possible. Here too a slowdown in the tempo of expansion will be unavoidable, but the depression will not be deep and will involve only a relative reduction of labor power in connection with the improvement of technology and the increasing relative weight of the larger and better equipped enterprises. And in this case too the process will not entail a reduction of the growth of output either in value or in natural terms. Since the redistribution of capital between departments by way of the price instrument is not a loss from the viewpoint of society—not a loss in the sense of that experienced by the afflicted groups of individual capitalists in I—it follows that the real loss here too is in the destruction

of some inventories of means of production (the spontaneous combustion of coal, for example) and in the insufficient utilization of potential labor power, during the ensuing cycle, in the department preparing means of production.

That is how matters stand in the case where, with free competition, and given a more or less proper relation between total production and total consumption (the corresponding demand being understood to be effective), it turns out that the means of production and labor power are improperly, or disproportionately, distributed between the two basic departments.

The disruption is much more serious in the case where proportionality between society's total production and total social consumption is violated. In the present case we need not be concerned with the concrete reasons why this violation might occur. Suppose it arises in an epoch of great new railroad construction, or in one of the recurrent periods of massive fixed-capital renewal in industry after a crisis, or as a result of both of these causes. The increase in demand for I's production, going beyond II's expanding demand caused by replacements and by the accumulation of additional c, leads to the full utilization of all equipment in I, to a stimulating rise of prices (which increases I's resources of money capital), to an increased tempo in the growth of workers, and partly to higher wages. The strong upsurge in I leads to new construction of heavy industrial enterprises, and besides expanding the circulating portion of constant capital it also causes a rapid increase of new fixed capital in I, or of large "C." While they are being constructed, however, the new enterprises yield no production, even though they do create demand for construction materials and increased transport shipments, while the additional workers in I create a further demand for the means of consumption coming from II. This sharp increase of demand for articles of consumption provokes Department II to undertake a maximum expansion of production, *which has a tendency to adjust to the current demand from I as though it were permanent.* But II's expansion involves, above all, an increase of its own demand for means of production, for in II as well there begins a rapid increase of fixed capital. Thus Department II, having been provoked into expansion by I, itself provokes I to undertake even further expansion. When the new enterprises in I begin to function, they are in a position to satisfy not only the entire supplementary demand for fixed capital resulting from the original expansion, but also the new demand coming from II. But when the original new demand, which caused the recovery, is satisfied,

and when the fixed capital in I has been expanded, then I's production apparatus turns out to be greater than what is required to service the enlarged demand from II for means of production. Then the crisis begins in I, during which there occurs a contraction of output, which had been inflated only under the influence of temporary causes. Next it turns out that II, having been provoked to expand, has gone beyond the limits of I's current need for means of consumption, since II expanded in order to satisfy a long-term growth of consumer demand. The reduced demand for means of consumption begins at the very time when II has expanded in order to satisfy this long-term growth of demand for means of consumption. Having been twice provoked into expansion, Department I sharply reduces its demand for the output of II, and the crisis spreads into II.

How will all of this process take place in conditions of free competition?

First of all prices in I begin to fall sharply, after rising during the period of expansion, when this price rise obscured the real extent of expanded reproduction; that is, when the value integument was inflated far beyond the limits of real expansion of new means of production *in natura*. This rise on the part of prices, together with the influx of capital from spheres outside of I, is the spontaneous form of financing massive new construction and expanding output that is characteristic of capitalism. The decline of prices, given this great expansion, does not yet resolve the problem of finding a way out of the crisis. Now Department II acquires, in response to its reduced demand, more means of production *in natura*; but in this case there is no stimulus to make purchases, for Department II is cutting back production. If Department II, with the previously inflated prices, received 4,000 units of means of production in satisfaction of its correspondingly increased demand, now II needs perhaps only 3,000 units. And because prices for I's production have fallen by 20%, II acquires these 3,000 *in natura*, for 2,400 in terms of value. The price decline spreads in II as well, giving Department I the advantage that its v + s/2 requires fewer resources in the form of money. In general terms the reduction of output and the growth of unemployment will take place in both departments. This curtailment in the employment of labor power is the first real loss to society that is associated with the capitalist system. Society's second real loss lies in the fact that a portion of the fixed capital and other means of production are rendered inactive due to the convulsive character of the very process of expansion when it is caused by a concentration of great new

orders for fixed capital in the span of a very short period of time.

But with free competition this downward movement of the entire level of production is halted at a certain stage by one very important circumstance, thanks to which the decline of output, spread out over time, need not involve the complete loss of all the massive surpluses of commodities being produced. The very fact of furious competition between capitalists, in the struggle over current demand, compels the strongest enterprises to reequip themselves with new technology, at the same time as the weak automatically fall out of the system. And it is this reequipping, to satisfy a reduced demand at lower prices, which creates a supplementary market in the period of depression and serves as the cause of an about-turn in the conjuncture. In Department I itself, whence the crisis originally spread, this type of reconstruction is especially important for the future.

Once the turn has been made into a new phase of expanded reproduction, those workers, who previously were drawn into production only due to the new orders for fixed capital, will be organically and permanently reabsorbed. The same will hold true for the new additions of fixed capital, which were still redundant only a few years earlier but now will be regularly utilized in the course of a normal year of expanded reproduction.

Thus the system of free competition turns out to be a very important factor for overcoming crises and for shortening periods of especially acute unemployment and especially significant underutilization of newly created fixed capital—although, on the other hand, it is precisely due to this system that the replacement of a cyclical recovery by depressions takes on such a sharp and dramatic character.

Once it is in existence the capitalist system is menaced not by this succession of expansions and crises, but by a thrombosis *in the transition from crisis to depression*. A reduction of output in itself is the greatest factor contributing to a prolonged narrowing of the market if the system does not possess sufficiently powerful stimuli to pull out of a depression on the basis of the free operation of the law of value. *The lowering of prices and rapid technological progress, mercilessly smothering all the backward enterprises, is the mechanism that facilitates preparation of a new expansion based on orders for new fixed capital.*

In the arbitrary numerical example with which we operated in our initial scheme of reproduction, we did not use figures to elucidate the problem of expanding fixed capital. Now we must do so. In analyzing the phenomena that concern us we must not remain any longer within

the limits of Marx's schemes in Volume II of *Capital*, because there Marx eliminated the problem of the cyclical reconstruction of fixed capital, and especially the construction of new fixed capital, by allowing the entire process to occur in relatively short periods of time. By adopting the simplifying assumption that all fixed capital is amortized and reconstructed in the course of a year, Marx left this question to subsequent investigation and simultaneously set aside the question of the influence on the reproduction process of changes in the organic composition of capital. However, in other places Marx did raise this question and he did perform the service of formulating the view that the periodicity of capitalist crises is explained by the uneven occurrence, over time, of the reproduction of fixed capital. We shall have more to say on this matter in what follows.

In our original scheme for Department I the new annual cycle begins with an increase of 666 on the part of cI. This sum might consist, on the one hand, of expanded reproduction of material and fuel, but it might also denote a certain increase of fixed capital; that is to say, a part of this sum will go to increasing large "C" and will enter into amortization in the following cycle. But such a smooth growth of fixed capital is not characteristic of the capitalist system. Let us suppose that Department I received vast new railway orders and at the same time was obliged to increase its entire fixed capital by 10% over a brief interval of time. In that case a completely new situation arises from the viewpoint of equilibrium between Departments I and II, a situation that is both specific and temporary. How is Department I able to resolve this problem from the technological, economic and financial point of view? Where will it find the resources for such a sudden expansion of output?

If we remain within Marx's schemes, which depict a more or less smooth increase of variable capital, without singling out fixed capital, we cannot discover any answer.

In this case we must begin, first of all, with the presence in real capitalism of significant reserves of fixed capital, raw materials, and so on. These reserves serve as very important resources for the entire movement. This point too could not be reflected by Marx's schemes at the stage of his analysis where he stopped dealing with the problem. Moreover, the full utilization of reserves frequently allows things to proceed merely with an increase of circulating capital.[5] With respect to finances, as we have said, the problem is resolved by the influx of new capital in money form and by the increase of prices for I's production, which furthermore makes it possible to mobilize all the reserves of

circulating capital in their natural form. Finally, additional capital was needed in money form in order to increase v, which must be realized in the form of means of production through exchange for cII, which also causes production to expand rapidly.

Suppose that v now grows in both departments, over two such years of feverish expansion, reaching 3,500 in place of 2,222, and that the surplus value, for those two years, equals 6,500.* After deducting the fund for capitalist consumption, the remaining surplus value goes to increase circulating capital in the amount required by the tempos of reproduction that have been adopted, and 2,000 represent the increment of fixed capital. It is this increment of fixed capital, this construction of new factories and equipment, which constitutes the enormous new ''market''for investments in Department I. But as this new capital is not yet functioning, it causes an increase from 20,000C to 22,000C,** without this fact yet being reflected in a proportionate increase of I's production. Meanwhile, the additional workers in I are already consuming much more, as are the capitalists, and Department II has already expanded in conformity with this inflated, although temporary demand. At the same time Department I, often before the new fixed capital begins to operate, is already satisfying the expanding demand caused by growth in II, and doing so with the available resources, that is, above all, by mobilizing all the reserves of old fixed capital. When construction of the additional fixed capital is completed in I, the new enterprises provide an enormous increase of output at the same time as construction no longer employs workers and demand for their labor power declines. The result is an enormous increase of supply for the purpose of increasing cII, at a time when Department II is itself unable even to dispose of the production resulting from its previous growth. A crisis erupts. The crisis signifies a transition from the specific and temporary equilibrium resulting from the influence of intensified construction in I—and ending with the creation of new enterprises in I—to a smoother process of production, whereby the newly created fixed capital is assimilated and all the proportions are temporarily reconstructed until the arrival of a new expansion and a new fever.

If all of this occurs in conditions of free competition, then alleviation of the crisis results from a new increase of orders for fixed capital in both I and II, but now this renovation of fixed capital assumes a different character. What occurs now is the replacement of old technology by new technology in the stronger enterprises, which eliminate

their competitors and adjust to the fall of prices. Demand from the gold industry for new fixed capital also plays a certain role in turning things around at precisely the most acute moment of the crisis. This is the only sphere that profits, rather than suffers, from the general crisis. It renovates its fixed capital when prices are lowest, and it experiences no sales crisis of its own because it produces the object of everyone's pursuit. Finally, it enjoys the firm "monetary price" of gold, or a stable rate of exchange between gold and any other system of money.[6]

Thus it is precisely the pursuit of profit, in conditions of free competition, which leads to technological improvement in the epoch of depression; and technological improvement, in its turn, becomes a powerful lever for mitigating the crisis and for assisting the shrunken production apparatus to renew once more the cyclical movement in the direction of expansion.

3. Depressions and Crises under Monopolistic Capitalism

Now let us analyze the problem in the conditions existing under monopolistic capitalism. Here we must begin with the fact that the most immediate and direct stimulus both for expansion and for contraction of production is the pursuit of maximum profit.

As in the previous investigation, here too we shall consider what occurs in the case of a comparatively minor economic disproportion; in the case of a deeper depression, when there is a serious lack of correspondence between Departments I and II; and finally, in the situation of a profound general crisis, when a disparity emerges between all fields of production and the limits of social consumption.

But perhaps there will not occur such profound disproportions as abounded in the period of capitalism's endless partisan advanced in the epoch of free competition. Perhaps such disproportions do not generally characterize monopolistic capitalism in view of its greater "organization."

To this question we must respond just as Lenin did to talk of how monopolistic associations of capital "overcome" crises. Lenin wrote: "The statement that cartels can abolish crises is a fable spread by

bourgeois economists, who at all costs desire to place capitalism in a favorable light. On the contrary monopoly, which is created in *certain* branches of industry, increases and intensifies the anarchy inherent in capitalist production as a *whole*."[7]

These words by Lenin can also be applied to the relatively minor disproportions with which we are presently concerned. Monopolistic associations cannot regulate demand, even though they are themselves in part the originators of demand, as in the case of vertically organized trusts. They are better able, for a number of reasons, to calculate what demand will be, especially if both the suppliers and the purchasers are controlled by one and the same banking concern; nevertheless, the sphere of demand, reflecting in most cases the condition of the entire economy (which is not subject to monopolistic control), also brings many surprises even under monopolistic capitalism, particularly when one takes into account the intensified and frenzied struggle between rival trusts, who keep their strategic intentions secret from one another. It is a fact that since the dominance of monopolies was first established beyond question in the most important capitalist countries, that is, since the beginning of the twentieth century, the history of capitalism has already included several general crises (1899–1902, 1907, the crisis that began in 1913–1914 but was interrupted by the war, the postwar crisis of 1920–21, and the most profound crisis of all in 1929–1930). It is equally a fact that depressive fluctuations, some more severe than others, have been even more frequent in a number of countries.

Let us suppose that we are dealing with a disproportion under monopolism that is not particularly severe. The disproportion will take the form of a cessation of demand for the production of heavy industry, in which the historic pattern is for monopolistic tendencies to develop earlier and become much more pronounced than in other branches of production. How do trusts respond to this disproportion? They respond by curtailing first supply and then production, endeavoring to maintain the former prices. Looking at things from the side of production, the consequence is that we immediately encounter a reduced utilization of both labor power and equipment; that is to say, we immediately come into collision with an intensified thrombosis of the productive forces, which is the main evil of monopolism and the chief expression of its tendencies in the direction of decay. If the agents of demand are themselves, for the most part, branches that are embraced by monopolistic associations, then they receive none of the stimulus, such as we saw in

free competition, to use the same sum of purchasing power in order to acquire a greater volume of means of production *in natura*. Instead, they will reduce demand even further and wait for a change in the conjuncture.*

A situation is thereby created that differs in essence from the period of free competition. In free competition the reduced demand for heavy industrial production brought about a decline of prices, as a result of which the stronger enterprises, by maintaining demand, attempted to acquire more means of production from heavy industry for the same sum of purchasing power. Thus the affair usually ended not with curtailed production in heavy industry, but merely with lower prices and attempts, through this response, to expand the market and overcome the disproportion. From the viewpoint of social production as a whole the disproportion was surmounted not by paralyzing a part of society's means of production and labor power, but by a transfer of capital from one part of the economy to another through the instrument of prices. Under monopolism, in contrast, in order to resist such a flow of capital to other branches, a part of the productive forces is immediately paralyzed; that is to say, *monopoly emerges as a factor of decay in the entire economy, its effect being to delay the transition to expanded reproduction*. A monopoly concentrates its efforts at the point of appropriating surplus value and thus narrows the arteries leading to increased creation of surplus value on the basis of expanded reproduction throughout the economic organism. *Never before has the social character of production bristled with such force against the private character of appropriation, or the private power of disposal over society's means of production and its new capital, as it does under monopolistic capitalism*.

Now let us consider another case, involving an increase of demand that is not anticipated by the "production plans" of the monopolies. Likewise in this situation, the most favorable of all for expanded reproduction, monopolistic capitalism concentrates upon "appropriation," or more accurately, has greater opportunities to concentrate upon appropriation than would exist for capitalism in the epoch of free competition. The result is to reduce to a minimum the positive effect of such a situation in terms of promoting expanded reproduction throughout the entire economy. The expansion of demand leads first to a price increase, and then to an effort to satisfy demand by adding more backward enterprises and those held in storage to the technologically advanced ones already in operation. Here too there is a great contrast with

what occurs under free competition; and in this instance too the contrast acts to the disadvantage of the entire economy with respect to the opportunity for all branches to break through to a higher level in the development of production. In analogous circumstances, under free competition, the producers also raise prices. But this price increase, to begin with, was moderated by competition; and what is most important, it also brought with it the establishment of new, technologically more advanced enterprises, together with an increase of supply, a price decline, and closure of backward enterprises.

Monopolism, in this manner, consistently reopens backward enterprises, whereas free competition shuts them down.

It maintains high prices, whereas free competition, after a period of price increases, acts to reduce them.

This maintenance of high prices retards the development of production in those branches whence the additional demand originated. If it originates in light industry, then the expansion of cII is retarded: fewer means of production are supplied in natural form for the same purchasing power, thus impairing the development of a recovery and further expansion.

The most important point is that the monopolistic associations of Department I respond to an increase of demand from Department II by bringing obsolescent enterprises back into operation. Thus they prevent the emergence of new enterprises, which in a similar situation, during the epoch of free competition, would be established in the sphere of producing means of production. Monopolies make it impossible for the whole chain of production to advance to a higher level.

To illustrate this very important propostion let us refer to our earlier example in the production schemes used above. Suppose Department II demands c in the amount of 4,000 rather than 3,333. With free competition Department I endeavors to satisfy this demand by use of the available equipment, although here too backward enterprises are brought into operation and prices rise. At this stage there is no difference from the methods of monopolism. But at the same time, in this case, new production is undertaken and new enterprises begin to be constructed, thereby creating a supplementary demand for means of consumption, prompting further expansion in II, and encouraging it to enlarge its fixed capital. New demands are made upon the production of I, including production in I's new enterprises, and the reequipping of II is further facilitated by lower prices for means of production. All of this process might be brought to an end by a general crisis. But for

society the advantage of this type of movement lies in the fact that for two to three years feverish work takes place, involving the full production capacity of the available equipment, full utilization of the entire reserve army, and an increase in the general number of working proletarians. The capitalist system as a whole emerges from this period with more fixed capital in both departments, even though the additions, for a certain period of time, prove to be excessive. In the ensuing stage the capitalist system is in a position to invest significantly new accumulations in circulating capital; it assimilates more thoroughly the fixed capital created previously, rather than creating it anew, and thus is capable of moving in the direction of a new and sudden cyclical expansion.

Under monopolism the movement from recovery to expansion is more difficult. It is impeded, in the first place, by the enormous concentration of production, a factor associated both with economic and with purely technological causes. To construct a gigantic enterprise in ferrous metallurgy, with a capacity of a million tons of metal, is economically difficult above all because of the size of the enterprise and the expenditures dictated by the technology itself. An immense concentration of capital is needed, even apart from the existence of monopolistic associations of capitalists within the given branch. But no less important, on the other hand, is the power of these associations, which are able to smother any new entrepreneurial ventures even before their birth. Hence the tendency to make do with the existing equipment, to use the old enterprises held in storage, and only in *the extreme case* to begin either reconstruction or entirely new construction.

It is true that in this period of the cycle a situation appears to emerge in which monopolistic capitalism is able to use the existing means of production more fully and economically, whereas under free compeition they were squandered. But that is a profound illusion, rooted in an inadequate understanding of the fact that the principal evil of capitalism is found less in the squandering of means of production than in its wasteful treatment of the most important of all productive forces—the labor power of society. *Underutilization of the available labor power—that is the principal waste associated with capitalism.* Its ever-increasing inability to absorb tens of millions of "redundant" workers into the production process, and thus to expand the market through *prior* expansion of production—that is capitalism's Achilles heel and precisely the contradiction which, under monopoly capital-

ism, grows to monstrous dimensions. Saving hundreds of millions by using old equipment, monopolistic capitalism makes it impossible to produce the tens of billions of new equipment and new means of mass consumption that could be created by the tens of millions of unemployed workers in the world economy, workers who instead are condemned to drag out the miserable, semistarvation existence of the unemployed and the impoverished. Under free competition the industrial labor force is smaller in quantitative terms, but is used relatively more intensively. All of the statistics of capitalism over the past 50 years confirm this point with perfect clarity. What is the significance of the wasteful use of equipment in the epoch of free competition when compared to this paralysis of labor power?

It would be absurd, on this basis, to draw the conclusion that classical capitalism was a more progressive form of capitalism than imperialism. As Lenin has already demonstrated, the epoch of free competition was itself responsible for giving birth to and for growing over into monopolistic capitalism, as the highest of all capitalism's forms. But it remains an incontestable fact that under free competition the productive forces in existence at the time were utilized more fully, and that any blockages that did occur (and they are inevitable in the commodity-capitalist form of production) also created greater opportunities of breaking through to expanded reproduction. The knowledge needed for technological progress was put to use with relatively greater speed; and the position of the working class, at least in the leading capitalist countries, was able to undergo relative improvement.

Before pursuing the matter further, at this point it is necessary to say a few words, mainly from the general theoretical point of view, concerning the relationship between competition and monopoly.

Although Lenin, in his work *Imperialism, the Highest Stage of Capitalism*, speaks of the fact that monopolies "play the decisive role in economic life," that "competition turns into monopoly," that commodity production "in fact is already undermined," and so forth, he is also very definite in underlining another fact; namely, that despite the enormous reinforcement of monopolistic tendencies competition is not and cannot be eliminated, but rather exists alongside of monopoly. Lenin wrote: "At the same time the monopolies, which have grown out of free competition, do not eliminate the latter, but exist over it and alongside of it, thereby giving rise to a number of very acute, intense antagonisms, frictions and conflicts."[8] Not only are there no inconsistencies in these remarks, but they are, on the contrary, the fruit

of a well thought out and profoundly true understanding of imperialism as a many-sided and deeply contradictory economic system.

We are obliged, therefore, to provide answers to the following four questions.

1. Why is it that monopolism does not and cannot eliminate competition?

2. Why is it that monopolies, which at first glance appear to signify the "organization" of at least part of the market, in reality do not reduce but actually reinforce the disorganization of capitalism's economic life?

3. Why does monopolism lead not to ultra-imperialism—or to the alleviation of contradictions and chaos through centralized management of the economy on a capitalist basis—but instead, through the *intensification* of contradictions, to a socialist plan and to the proletarian revolution, first and foremost?

4. What influence does this existence of monopolies and competition exert upon the reproduction process under capitalism and upon the character of capitalist crises?

Monopoly cannot eliminate competition because it does not eliminate what is most fundamental—private property in the means of production, the market, and the struggle for a maximum share of the profits. If the positions of "outsiders" are weakened in their competitive struggle with monopolistic associations within the context of national production, at the same time the competition between trusts themselves is accentuated, taking the form of a struggle not only for markets in which to sell the existing production, but also in all other manifestations of economic life, above all in the money market, in the area of all types of credit, in the struggle to redistribute society's new capital, and so forth. The strength of competition is not measured by the percentage participation of outsiders in national and world production, nor is it measured only by the acute competitive struggle between monopolistic trusts; it is measured also by the constant potential for competition, a potential that results from private property in the means of production and from the dominance of different capitalist groups over society's new capital. In the broad sense of the term, competition does not disappear under monopoly: only its forms change. Imperialism cripples free competition but does not kill it; it "undermines" the commodity economy, but it does not and cannot, by the very nature of capitalism, do away with it.

Monopolism intensifies the contradictions of capitalism in the area

of both politics and economics. In other sections of this work we shall speak of the contradictions of imperialism as a social system. The economic contradictions and economic disorganization of productive life are felt much more forcefully under imperialism than under free competition for the following reasons.

If we ignore the precapitalist forms existing alongside of it, classical capitalism represented a certain uniformity and homogeneity in the system of production relations and a uniformity of regulation over economic processes. The absence of a plan, anarchy in production and sales, more or less severe disproportions and economic crises—all of these were facts. But at the same time free competition also provided a basis for the free and extensive operation of the law of value as the regulator of the whole of economic life. Anarchy of production in classical capitalism also entailed a principle which struggled against the negative consequences of anarchy. All relations adjusted to precisely this type of structure. Anarchy and the absence of planning in production and distribution, cyclical expansions and crises: these were the forms of movement. The law of value was the regulator of economic life; and this regulator, on the basis of free competition, acted with both negative and positive consequences.

What did monopolism introduce that was new?

Monopolism represents more accurate knowledge of the market and a better adjustment to demand in any given interval of time. But this knowledge also reinforces the tendency to curtail production because it eliminates that anticipatory expansion, for an unknown demand, which was so characteristic of the epoch of free competition and acted as such an important stimulus for expanded reproduction. Passing over the economic corpses of miscalculating and ruined capitalists, the economic system as a whole developed its production more rapidly because everyone produced for a market of unknown capacity—and thus actually created this supplementary market and increased its capacity. *Just such* a lack of planning was necessary to capitalism and created the form of movement for the entire mechanism of expanded reproduction. It is this very mechanism which is corrupted by monopolism. Monopolies are better able to calculate demand and to adjust supply to demand in separate sectors, but they do not carry things through to planned production for the purpose of directly satisfying society's needs. Instead, they merely limit the volume of production, create a thrombosis in society's economic development, and intensify the contradiction between the capacity of the available productive forces and their degree

of utilization. The only result is increased disorganization of the whole system and a reduced tempo of economic development.

By limiting, deforming, and mutilating free competition, on the other hand, monopolism also mutilates and deforms the regulator of a commodity economy. Being unable to replace this regulator with the planning principle, monopolism causes the system as a whole to become increasingly disorganized. To summarize, this system undermines both the stimulus for rapidly expanding reproduction and the possibility of spontaneous self-regulation, as they emerged in the epoch of free competition. A socialist plan elevates the economy and raises its tempos of development to an unprecedented level, whereas a "capitalist plan," pursuing the goal of plundering purchasers, only enhances the general anarchy of a capitalist economy. It is precisely in this sense that one must interpret Lenin's view that competition exists side by side with monopolies in the imperialist system, and that this coexistence does not diminish, but rather "reinforces and intensifies the chaos characteristic of *all* capitalist production as a whole."

Here we see the basic structual contradiction of the imperialist economy as such. To the general contradictions of capitalism, to those that are, so to speak, inherent in all forms of capitalism—as production for the market in pursuit of surplus value—there is now added this further contradiction of capitalism's imperialist phase of development. The consequence is to raise all the inherent contradictions of capitalism to a higher power.

If one could conditionally speak, therefore, of classical capitalism, with all of it contradictions, including that between labor and capital, as a unity of opposites, then one would have to say that under imperialism this "unity" becomes the kind that exists between those who rebel and those who suppress rebellion. At a certain stage in the development and intensification of contradictions, this unity of opposites explodes; and it is this very transition that characterizes the period of wars and revolutions in which the world now finds itself.

As for the possibility of a transition from imperialism to superimperialism, such a possibility is excluded for the very same reason that the full liquidation of competition is excluded, namely, the fact that capitalism preserves its basic features and what is most essential to it—private property in the means of production, private appropriation of surplus value, and the struggle for a maximum profit. As a rule the rivalry between separate capitalist commodity producers and their associations remains; agreements and economic truces are merely

specific conditions of the struggle, temporarily stabilizing an ever-changing balance of forces. The concentration of capitalist property and of the power of disposal over society's capital in a few hands, in the hands of small groups of the largest capitalists, does nothing but centralize the forces opposing each other on the battlefield. It does not eliminate the battle itself. It is just the same as in modern warfare: the growing size of the armies, the concentration of command, the enormously increased power of weapons of annihilation, the use of "industrialized" methods of annihilation against the civilian population as well as regular armies—none of these changes renders war impossible, they only make it more devastating and bloody. A distortion of the economic consequences of competition, without the possibility of eliminating it; and a distortion of the law of value as a regulator, without the possibility of replacing it with a plan—these are the principal characteristics of the economic structure of imperialism. Changing the character of the economic cycle under monopolism, as compared to the period of free competition, this circumstance also has an essential influence upon the reproduction process. It is precisely the existence of monopoly alongside of competition, to my mind, which explains in part such a rapid accumulation of redundant fixed capital under imperialism—a fact of enormous significance for the deformation of the cycle under imperialism and for a change in the character of capitalist crises. The following exposition will be devoted to a more detailed elaboration of this question.

But at this point we encounter such questions as the following. If one says that the main evil of monopolism is the accumulation of unused equipment and the immobilization of fixed capital, then is it not contradictory to find a second evil of monopolism in the fact that it impedes the development of reproduction through the increased construction of fixed capital? Why does the production system need this new fixed capital, if a growing percentage of the available fixed capital is not being used?

This apparent contradiction is resolved in the following manner. If monopolism were to accumulate redundant fixed capital in conditions where society's labor power was fully employed, then an accelerated tempo of constructing new capital would be senseless indeed and would even further increase the immobilization of capital. But the point is that monopolism accumulates redundant fixed capital and raises the percentage of idle labor power at the same time as it does virtually nothing to satisfy the consumer needs of the broad popular masses. Capitalism

satisfies only "effective" demand. And it sets its own limits to this demand, in the first place, by its blockage of the process of expanded reproduction, with the consequence that tens of millions of unemployed workers receive no wages. Second, it sets a limit by halting the growth of wages, however modest it might have been during the epoch of classical capialism. Later we shall return to this point, which is exceptionally important, and demonstrate how, in conditions of a curtailed development of the productive forces, the enormous growth of capital's concentrated political power becomes yet another factor in the blockage of economic development.

To continue our analysis of the problem at hand, we must raise one further question of this sort. Is the fact of an increase of unused fixed capital and unemployed workers in the period of monopolistic capitalism, especially in the postwar period, a phenomenon of a conjunctural order; or is it integrally connected with the very structure of monopolistic capitalism? This question can be formulated even more precisely as follows: if monopolistic capitalism systematically accumulates unused reserves of labor power, being unable to resolve the problem of expanded reproduction, then what economic necessity compels it to accumulate redundant fixed capital?

We answer the question as follows.

The essence of monopolistic capitalism is its limitation and, if possible, suppression of free competition in whatever branch of production happens to be gripped by monopolistic tendencies. But since monopolism cannot, generally speaking, eliminate free competition—as Lenin, in his day, observed in his *Imperialism*—and since it also cannot liquidate cyclical fluctuations in the course of capitalist development, it follows that under monopolism too every branch of production experiences first expansion and then contraction of demand for its production. During the epoch of free competition a cyclical increase of the demand for production led, in the first instance, to greater use of the capacity in existing enterprises, then to use of reserves of fixed capital and inventories of materials within the particular country, and ultimately, with a long and intensive growth of demand, and particularly in periods of general industrial expansion, to the emergence of new enterprises. We have already shown the great importance of this type of movement for resolving the problem of expanded reproduction in the epoch of free competition.

Monopolism, in contrast, endeavors by its very nature to ensure that the cyclical expansion of demand is satisfied entirely by way of increas-

ing production within the *existing* monopolistic associations. In periods when demand is recovering, these associations strive to prevent the emergence of new, competing enterprises. But for that purpose they must possess such reserves of fixed capital as will allow them always to satisfy a growth of demand, in its entirety, regardless of where it arises or what dimensions it assumes.

Otherwise the sudden growth of demand, going beyond the limits of a trust's production capacity, will not only provide water for the mill of enterprises which do not belong to the trust and compete with it, but might also create the need to increase imports, thus acting to the benefit of competing trusts in other countries. If the trusts in different countries have an agreement to divide the market, as in the case, for example, of the steel trust on the European continent, then here too, given a rapid growth of demand, the trusts with the maximum reserves of fixed capital will derive the major benefit in terms of increasing their quota. After the growth of demand had already begun it would be too late to create new fixed capital, even with rapid rates of modern construction.

It is clear, therefore, that enormously increased reserves of fixed capital, along with the waste of human labor that is connected with and consequent upon that increase, are inherent in the very structure of monopolistic capitalism. If the problem of the market, or the problem of realization, is the fundamental limit imposed upon capitalist production in general by its own structure, then under monopolism, in conditions of curtailed development or even of its direct cessation, this limit becomes extremely restrictive.

Hence any possible growth of demand is anticipated by enormous reserves of fixed capital, and in this respect monopolistic capitalism has no limit. The existing fixed capital of the entire world would probably be completely inadequate for purposes of expanded socialist reproduction in the world economy. Not only would it be utilized fully, but it would probably also have to be considerably expanded even in the first years of a socialist regime. For capitalism, however, with its thrombosis in the area of expanded reproduction, there is no need to be economical in this respect, and fixed capital is always available in an enormous surplus. In the same manner contemporary capitalism knows no limit with respect to labor power. Hence its wastefulness in this regard and the mad struggle for every dollar of effective demand. The more narrow this artery becomes, the more cruel is the struggle by competitors to pass through it, and the greater is the cost to the entire system.

The internal connection which we have discussed between the accumulation of enormous reserves of fixed capital and the very essence of monopolism also has quite considerable importance for understanding both the process of expanded reproduction under monopolism and the character of economic crises under the same system.

But before continuing with this exposition I would like to eliminate one potential misunderstanding. I do not think, by any means, that the enormous reserves of fixed capital in the contemporary (that is, postwar) heavy industry of the capitalist countries, were formed exclusively as a result of the tendencies I have cited. I do not deny the fact that the world war, through its intensive work for the market of human annihilation, provoked a sudden increase of the apparatus of heavy industry. But this powerful new factor acted only to supplement a tendency which was fully defined even before the war and had no connection with it. Had capitalism experienced expanded reproduction after the war, with the same tempos as prevailed in the epoch of free competition, this redundant fixed capital would have been assimilated very quickly. The fact that no such process occurred serves as further confirmation that another factor, acting in the direction of accumulating redundant capital, was also present.[9]

How does the presence of this tendency, whose existence under monopolism we have now established, act to change the character of crises in the epoch of monopolism?

Remaining for the moment in the realm of a purely theoretical analysis, and leaving aside consideration of another important circumstance, namely, the halt or dramatic slowdown in the growth of variable capital, we must make the following observations.

If monopolistic capitalism, for one reason or another, does enter into a period of industrial recovery, it has the ability, for a considerable time, to satisfy the growing demand by using the resources of the production apparatus already in existence. Thus the recovery cannot develop into a general economic expansion. It is for this reason that the degree of utilization of the productive forces, given the same growth of demand as under free competition, always remains at a lower level.

Another extremely interesting peculiarity of crises under monopolism must be found in the fact that the moment at which crises occur is *relocated.*

We have already looked, in general terms, at the typical scheme for the emergence and resolution of a general crisis under free competition. The impulse for expansion comes from concentration, in a rela-

tively brief interval of time, of large orders for fixed capital. Working under unusual stress, Department I is not able to satisfy the demand for fixed capital using the existing enterprises: along with the more intensive use of equipment already available in heavy industry, it also undertakes far-reaching construction of new enterprises. Thus demand for the means of consumption, which originate in Department II, becomes particularly acute, and all this provokes II as well to expand its fixed capital—despite the growth of prices for elements of fixed capital, which naturally weakens this tendency. The increase of I's own demand for fixed capital is thus transformed into an increased demand for fixed capital in II. The crisis erupts when the new enterprises in I, producing fixed capital, begin their operations. The inflated portfolio of orders turns out to have been fulfilled, whereas Departments I and II both expanded as if this temporary demand, so swollen in magnitude, were permanent.

Under monopolistic capitalism, in contrast, this entire process must develop differently. Suppose that reserves of fixed capital are "normally" available under monopolism to the extent of 30%, in place of the "normal" fixed-capital reserves under free competition, which might be 15%. If the additional demand for fixed capital, providing the basis for the expansion, can be satisfied by reducing the level of reserve equipment to 10% instead of the normal 30%, or even if all the reserves are used, then it is possible for the monopolistic trusts in heavy industry to manage without any new construction, especially if a number of improvements can be introduced, requiring little time to implement. But the very nature of monopolism requires monopolistic trusts to possess a substantial reserve of fixed capital. *Thus the increase of fixed capital in heavy industry itself develops mainly at the second stage of this process*, when the first wave of growing demand for fixed capital has already subsided. The crisis erupts not at this moment, but much later, because by expanding its own fixed capital heavy industry creates for itself a new, supplementary market, a new demand which delays the crisis.

But this postponement must have even more profound consequences for Department II and for those branches of I preparing fuel and many types of materials. These branches are able, during this interval of time, to develop upon an expanded base that is much more stable than could be achieved in the period of classical capitalism. When the whole of heavy industry possesses its "normal" percentage of redundant capital, its recovery ends. A crisis erupts, shaking the entire economy

with tremendous force, and the whole of capitalism emerges from this crisis with an even greater percentage of both redundant capital and idle working people.

During the period when the majority of orders for fixed capital comes from heavy inudstry itself, the purpose of this demand is to increase fixed-capital reserves. There is no particular urgency in completing this task, with the result that industrial recovery during this period need not be accompanied by rising prices. Likewise even the first phase of industrial expansion can occur without a dramatic price rise, for the trusts satisfy demand by using their existing reserves of fixed capital. From the viewpoint of the economy as a whole, therefore, a transfer of capital from one branch of production into another, through the instrument of rising prices, similarly need not occur. At the very least it need not occur on the same scale as could be observed during industrial recoveries in the period of free competition.

If this entire process occurs in a period when the index of commodity prices has generally deviated upward from the value of gold, then it is even more probable that the development of the industrial expansion will not bring a significant rise of prices whereas the crisis will bring a significant decline.

All of these considerations can be briefly and generally summarized as follows. If we begin with the general tendency of monopolistic capitalism to accumulate unused fixed capital, we can see that in such circumstances an industrial recovery has less chance of developing into an industrial expansion. At the same time an industrial expansion, if it should occur, terminates much later in an industrial crisis than would have been the case in conditions of free competition. At this juncture, however, the disproportion that has been created in the economy is intensified even further, and the crisis must entail a considerably more profound shock to the whole of economic life than was observed in the epoch of classical capitalism.

That is how the matter stands if we look at all of the processes abstractly, leaving out of account all the complicating influences connected with several countertendencies, which we shall have to consider when studying the concrete facts of the period of real monopolistic capitalism.

At this point there arises one further question that must be addressed in a theoretical analysis of crises under monopolism. We have analyzed the results of a conjunctural recovery or decline of demand under monopolism. If it is possible for such changes to occur for a number of

reasons—principally because monopolistic capitalism is production for the market rather than a planned economy—then just what is the origin, in general, of any industrial expansion under monopolism?

This is a perfectly legitimate question insofar as the period of monopolistic capitalism is the period of capitalism's decay, a decay that is particularly manifest in the growing paralysis both of fixed capital and of society's labor power.

Let us attempt to analyze this question, beginning with an assumption of pure capitalism in the stage of free competition.*

What are the conditions which might create a basis for industrial expansion under capitalism in the period of free competition?

The answer will vary, depending upon whether we take as our starting point a separate national economy, setting aside its links with the world market, or the world economy, as a single capitalist entity, eliminating in this case the consequences of its division into individual national economies. Although I do not consider it particularly productive to dwell for long on investigating the question at such a degree of abstraction, I do believe the study must be carried through this phase in order to reach certain theoretical results that are necessary for an understanding of concrete capitalism.

I must only emphasize that such a presentation of the question, because it is based upon the fiction of pure capitalism under free competition, is conceivable only as an auxiliary method of investigation. The history of real capitalism has shown that capitalist forms of production do not disappear before capitalism passes from the epoch of free competition into monopolism. These precapitalist forms survive and will survive up to the socialist regime.

If we take pure capitalism within the limits of a shut-in national economy, then under free competition the general basis of a new industrial expansion, as of the ensuing crisis, can only be expanded reproduction of the *capitalist* type. In this type of reproduction the increase of population, of the number of workers, of the wage fund and of the consumption fund of the capitalist classes, all occur unevenly, on the basis of constant disproportions. It is therefore impossible for the system to arrange this entire process over time in the form of a smoothly rising curve, such as the one reflected in the reproduction schemes given in Volume II of *Capital*. That curve is, so to speak, the general and generic path of the capitalist system throughout all the stages of its development. The specific features of the epoch of free competition are found in the fact that the increase, both of the wage funds and of the

scale of capitalist consumption, is based upon a more or less rapid development of expanded reproduction and a more or less regular periodicity of cycles, brought about by the uneven reconstruction and expansion over time of fixed capital.

If we take pure capitalism on the scale of the world capitalist economy, then to the foregoing disproportions and periodicity of cycles, connected with the conditions of producing fixed capital, we must also add those disproportions that result from the uneven development of capitalism in individual parts of the world economy, a factor that might complicate the entire process. This factor acts to increase the discontinuity of the cyclical development, ensuring a significant expansion in one part of capitalism or a more severe crisis in another. However, this unevenness can also be a source of expansion in one sector of capitalism, which then, although to a weaker degree, draws in the other sectors as well.

In both cases the wage fund is established by the supply of and demand for labor power in the market. There is relative freedom for workers' organizations in the class struggle to sell labor power more advantageously, and the capitalists do not possess the additional social strength that results from monopolistic organization of the economy and from closer ties, by way of monopolistic trusts, between the capitalist economy and the bourgeois state. In this respect we must keep in mind the general fact that even in a theoretical analysis of reproduction, and even when we begin with the supposition of pure capitalism, it is not possible to stay within the confines of a purely economic analysis. The balance of forces between the capitalists and the workers, a political factor, becomes an economic factor and cannot be omitted even from a purely theoretical analysis of expanded reproduction as a whole. It is only possible temporarily, for purposes of simplification at a certain stage of the investigation, to assume that the price of labor power, like that of all other commodities, corresponds to its value.

Marx frequently emphasized that the value of labor power is a variable sum: the level of consumption by the worker and his family depends upon the historical, cultural, and day-to-day peculiarities and conditions of his life, and is influenced by the long-run balance of forces in the class struggle between workers and capitalists. Furthermore, because of the rapid development of industry in the epoch of free competition, the demand for labor power was relatively higher than in the epoch of monopolism, with the consequence that wages rose in the countries of developed capitalism, even if only slowly. This is not

merely a conjunctural fact in the concrete history of capitalism, having no importance for a theoretical analysis, but a very essential circumstance of cardinal significance. The faster growth of production, the faster absorption of labor power into production, the growth of the wage fund, of the number of workers, and of the individual worker's wages—all of these elements are parts of *one* whole and characterize the entire system of capitalism in the epoch of free competition. In a theoretical analysis one can and must set aside all that is inessential and fortuitous in a given form or process; one must not, however, set aside the *constituent* features of the form or process itself. A growth of the number of workers and of the average wage in the leading capitalist countries is an inseparable part of the distinctive and historically unique moment represented by expanded reproduction in the epoch of free competition. Any understanding of the regularities of reproduction during this specific phase of capitalism must include this fact as an integral and organic component of the object being investigated.

As a rule, therefore, we have comparatively rapid growth of production, of the number of workers, of wages, and of consumption by the capitalists—in other words, growth of the aperture of effective demand, through which the capitalist system, by virtue of its structure, must force the whole process of expanded reproduction. The *form* of movement is one of cyclical fluctuations on a rising curve; the cyclical pattern is connected primarily with the uneven reproduction of fixed capital over the course of time. This is the form whereby new productive forces are drawn in, providing a spontaneous impulse for the entire process of development. For capitalism it has the inordinate advantage of mechanically extending the current limits of effective demand and carrying future production beyond them.

The same picture could be portrayed from another angle. At the level of development reached by classical capitalism the production of means of production outweighed, in terms of value, the production of articles of consumption, and played the leading role in the economy. The stimuli for a cyclical expansion of production, for the most part, originated here. The entire process could be described as follows. The epoch of classical capitalism was characterized by rapid expansion of production. Above all else this expansion of production meant a growing expansion of production of means of production; within the department producing means of production it meant primarily the expanded production of fixed capital. Within the limits resulting from both the tempo of expanding production and the tempo of the increasing organic

composition of capital, this production of fixed capital was unevenly distributed over time.

Because of the accumulation of a large quantity of orders for fixed capital within a comparatively brief interval of time, the production of means of production swells, new enterprises are constructed, the production of material and fuel within Department I similarly expands, and Department II also grows quickly. The automatic nature of development in both departments, based upon the concentration of orders for fixed capital in a short period of time, leads to the following results: with the passing of the temporary increase of orders for fixed capital, the speedily inflated apparatus of Department I, together with the volume of means of production currently being produced, turns out to be in excess of what is required. The consequence is that production of articles of consumption likewise proves to be excessive in relation to the system's effective demand, once the period of feverish expanded reproduction of fixed capital has ended.

Thus the basic elements of an industrial expansion in the epoch of classical capitalism are: 1) an increase of the number of workers and the wage fund; 2) a rise on the part of the *average* wage; 3) growth of consumption by the capitalist classes; 4) growth of demand for means of production (being several times greater than the absolute volume of consumer demand and exceeding the *tempo* of growth on the part of effective consumer demand); 5) a cyclical form of movement, for reasons already indicated; and 6) the impossibility of satisfying the demand for fixed capital with both the existing apparatus and all the reserves of production equipment in the branches preparing fixed capital. For these reasons, and because of the absence of monopolistic associations in general and the greater facility of establishing new enterprises, considerable new construction occurs in Department I, in turn further intensifying the general industrial expansion and thereby increasing the dimensions of the ensuing crisis.

Now let us ask ourselves: which of these elements of industrial expansion can function in the epoch of monopolism?

Here we shall deal with pure monopolism—although not with monopolism confined to the limits of a national economy, abstracting from its connections with the world economy. Instead, we shall be concerned with monopolism in the context of the world economy, taking into account the problem of capitalism's uneven development throughout the world as a whole.

An analysis of the theoretical problem of reproduction under

monopolism, taken within the context of a national economy (that is, abstracting from a country's links with the world economy), yields results so inconsequential for our study as to make it not worth dwelling upon them. To do so would imply abstracting from the most essential elements of the question itself: *monopolism emerges at a very high level of development of the world economy, as a single entity*; and the link between the structure of monopolism and the degree of inclusion of separate countries in the world economy, with its own laws, *is an organic link, internally conditioned from the viewpoint of the entire process as a whole.*

For this reason I shall speak only of monopolism within the context of the entire world economy, presupposing not only the existence of capitalism's uneven development, but also competition and struggle between the trusts and national economies, using the methods of monopolistic capitalism. Later I shall explain in more detail why I am making this stipulation. At this point I shall only observe that the fact established earlier—that is, the law of the inevitable growth of reserves of fixed capital under monopolism—is exceptionally important for understanding both the character of industrial expansions under monopolism and the dynamic of crises and depressions. This law presupposes struggle and competition between capitalist trusts belonging to different national economic systems; and in a theoretical analysis of reproduction and crises under monopolistic capitalism one must not abstract from the fundamental features of monopolism as such.

Now let us consider just what constitutes the basis of an economic expansion under monopolism. For reasons touched upon earlier, monopolism signifies a slower tempo of economic development in general. Is this fact of any significance for understanding the dynamic of expansions and crises under monopolism?

The answer, I believe, is obvious. Economic expansions and the ensuing crises must develop differently, not only because of the structural peculiarities of monopolism as compared to capitalism in the epoch of free competition, but also because of the slowdown in tempo of the whole movement. It is particularly in this connection that the organic link between the structural form of the economic system, the level of development, and the possible tempo of using the productive forces, is clearly displayed.[10] This fact becomes especially obvious if we look at two cases of expanded reproduction in conditions of free competition: that is if we allow a comparatively rapid tempo of development to remain unchanged in the first case, while it falls steadily in

the second. In essence we have already considered the first case. But it is interesting to compare this first case to the second, when the process of reproduction is slowing down. In the latter case we shall end, essentially, with a gradual approximation to conditions of *simple reproduction*, or a process representing the reverse of the transition (whether rapid or gradual) from simple to expanded reproduction.

The transition from simple to expanded reproduction involves a change in the conditions of equilibrium resulting from an increase of the value of constant capital at the expense of v. It will be sufficient to consider the following scheme, for which the figures, of course, are chosen quite arbitrarily.

Simple reproduction
I. 4,000c + 1,000v + 1,000s
II. 2,000c + 500v + 500s

Expanded reproduction (with one-half being accumulated and without the adjustment of II to I)

I. 4,000c + 1,000v
+ 500s (capitalist consumption fund)
+ 500s (accumulation fund),
or 4,400c + 1,100v + 500s (consumption fund)

II. 2,200c + 550v + 250s (consumption fund)

In other words: the transition from simple to expanded reproduction involves a relative increase of demand for means of production (in this example, also an absolute increase) as compared to the conditions of simple reproduction.

With the reverse process, a transition from expanded to simple reproduction, or with a slowdown of the tempo of accumulation, the opposite is true: the other conditions of a capitalist economy remaining constant, there must occur a *reduction* of demand for means of production. But insofar as demand for means of production is the primary demand and market for capitalism, and because this market depends only *indirectly* upon the scale of demand for means of consumption—to the extent that cII exchanges for v + s/2 of Department I—it follows that such a reduction, striking at Department I, the leading sector of the economy, cannot help but exert a serious influence upon all the condi-

tions of economic equilibrium, including the character of industrial expansions when the tempo of expanded reproduction is declining. In the present case, and for the time being, we are addressing this process in conditions of free competition; that is, we are operating with a conditional theoretical model. This situation could occur in practice, for example, if there were a greater growth of unproductive consumption by the bourgeois classes, in which case the result, taking our second scheme, would be to diminish the portion of surplus value going into accumulation, as compared to the consumption fund. The consequence, given a general relative decline of demand for means of production, would be a relative growth of II's share of society's means of production and a decline of I's share. And because I's share is generally much greater, in view of its high organic composition of capital, there would also occur a *relative* decline of demand for means of production *throughout the entire economy* and an increasing share of cII in relation to total c—the decline being relative because reproduction continues to expand, although at a slower tempo.

The situation presented here has enormous significance for understanding the character of the resulting proportionality that will prevail in circumstances where the tempo of expanded reproduction is declining. But this example is especially significant with reference to the declining tempo of expanded reproduction under monopolistic capitalism, for in this system the tendency to lower the tempo of reproduction is not a temporary and fortuitous circumstance, but is integrally connected with the very structure of expanded reproduction. The nature of this connection—what is cause and what is effect, and how effects subsequently become causes—this important and extremely difficult question will not presently be considered as a whole, although our entire account will gradually clarify the problem from several different perspectives. For present purposes our starting point will be the fact of a falling tempo of expanded reproduction under monopolistic capitalism, this presupposition being justified by the fact that it does not conflict, as the evidence attests, with the whole history of world capitalism over the last 20 years, a matter we shall subsequently discuss in more detail.

Starting then with this presupposition, and relying upon our analysis of reproduction under monopolistic capitalism, let us consider how the situation changes if the declining tempo of reproduction takes place not in circumstances of free competition, but when the system of monopolism prevails. Where might the basis now lie for an industrial

expansion? Does a monopolistic structure increase the chances for development of an industrial expansion, or does it have the opposite effect, imposing even greater obstacles to the development of expansions than those resulting from the general circumstance of a slower tempo of reproduction?

Let us begin with the number of workers, the level of wages, and the development of the overall wage fund. As the reader will recall, Marx began his schemes of expanded reproduction with a systematic increase of v in both departments. The basis of this approach could be either an increasing number of workers with the same average wage, an increase of the average wage with the same number of workers, or finally, both developments taken together. When speaking of the influence of technological progress in terms of displacing men by machines, however, Marx began with the fact that the very manufacture of machines requires a growing number of workers in the machine-producing branches. The result is an increase of the number of workers and an even greater increase of gross and net production in terms of value, along with an even more rapid increase of production in physical terms, as the perfection of equipment advances.

In this respect a fundamental change occurs under monopolistic capitalism because the balance of forces between the capitalist class and the proletariat alters to the disadvantage of the latter. The workers oppose the capitalists with the same workers' organizations as existed in the epoch of free competition (weakened now by betrayal on the part of the trade-union bureaucracy), at a time when the unified power of the capitalist trusts, merging ever more closely with their state, continues to increase. The result, in the leading capitalist countries, is that any increase of the wage level, even for the upper strata of the best-paid workers, is replaced by a systematic tendency for wages to decline.[11]

It follows that the development of industrial expansions, insofar as they are conditioned by growth of the wage fund, is weakened, although a countervailing factor also comes into operation in the form of an increase of the unproductive consumption of bourgeois society. It would appear to be a matter of indifference, for stimulating the growth of cII, whether the sum of 1,500 (in our first example) consists of 900v + 600s or 1,000v + 500s. But the reality is that apart from the changed composition of demand, including a curtailed demand for articles of mass consumption and an increased demand for luxuries, the most significant change occurs elsewhere: the end of wage increases weakens the stimulus to introduce new technology—a stimulus that acts

as an external force upon capital—and curtails demand for fixed capital, even though rationalization does take place under monopolism notwithstanding the end of wage increases. When this rationalization occurs in the circumstance of a general slowdown of the tempo of expanded reproduction, however, it narrows even more forcefully the basis for expansion in the following stage, because it is not accompanied by adequate expansion of the productive apparatus as a whole or by an increase of the number of employed workers.

As for the growth of consumption by the capitalist classes, this growth continues under monopolism, partially at the expense of the wage fund. We have already indicated the consequences of this circumstance.

Now let us turn to the question of demand for means of production under monopolism, particularly demand for elements of fixed capital. The great difficulty of this problem, from the viewpoint of a theoretical analysis, consists of the fact that we are here concerned not with an absolute contraction of such demand, nor even with its stabilization, but rather with a slowdown of its tempo of growth. If one begins not by explaining the causal dependencies of the phenomenon, but by giving an account of the consequences of a general slowdown of the tempo of expanded reproduction, taken as a presupposition and a concrete fact, the result will be to illustrate the causal dependencies through another approach. Among the relevant facts we have established the following: a) an increase of the obstacles to new construction under monopolism, arising from the enlargement of enterprises due to technical-economic causes; and b) an increase of fixed-capital *reserves* under monopolism, due to the specific conditions of its competitive struggle. To these considerations we must add: c) a multiplication of the obstacles to implementing new technological inventions. Created by engineers and technicians, working for the trusts in their own laboratories and experimental plants, these new inventions are only put to use in production on the condition that they do not promote excessively rapid moral wear of the existing equipment, whose value is colossal. Under free competition a new labor-saving machine was not introduced, despite its benefit to society, unless it raised the norm of profit in the enterprise. If it did raise the norm of profit it was also introduced by competing enterprises, with the result that its further introduction in other enterprises assumed *an economically compulsive character* even though it inflicted losses, in terms of moral wear, upon equipment that was still technologically fit for use. Under monopolism, in contrast, the trusts

themselves decide, upon the basis of their own calculations, whether the introduction of innovations would entail more losses than benefits. And they make this decision without fear of external economic pressure from domestic competitors. Either no such competitors exist, or they are very weak. Pressure does arise from trusts within other states, but such pressure (with respect to the domestic market) is greatly weakened by the system of tariff protection.

In his *Imperialism* Lenin emphasized that monopolism, in accordance with its very structure and its characteristic methods of struggling to increase profit, creates greater barriers to technological progress than existed in the epoch of free competition.

To all of these considerations we must finally add the above-mentioned fact of reduced pressure upon capital from the side of the working masses, in their struggle to raise wages. This reduced pressure results both from economic and from general-social causes, and further diminishes the incentive for technological progress.

Of all these facts I personally attribute exceptional importance, for purposes of understanding imperialism's dynamic of expanded reproduction, to the law of increasing reserves of fixed capital under monopolism, or the law of growing immobilization of means of production. This law results from the very structure of monopolism and its characteristic methods of competitive struggle.

On their own, increasing reserves of fixed capital would appear to *increase* rather than curtail the demand for means of production, as compared to the epoch of free competition. That would be true if the tempo of economic development as a whole, including the tempo of absorbing new working masses into the production process and providing them with steadily improving technology, remained the same as under free competition. But in fact that is not how things develop. The transition from free competition to monopoly is a transition to a slower tempo of expanded reproduction. In the first period of such a transition the slowdown is moderated insofar as the production apparatus of capitalism must work to increase reserves, or for a new and supplementary market for the means of production. But once monopolistic capital has become saturated with reserves of fixed capital, a new period must set in, a period during which the entire system passes over from one tempo of expanded reproduction to another, slower tempo, and from one set of conditions for proportionality in expanded reproduction to another set of conditions for the same process.

It is the transition to these new conditions of proportionality which must intensify to the extreme the struggle for an economic redivision of

the world, which Lenin saw as the fundamental cause of the first world war. It seems to me that the analysis of the conditions of reproduction under monopolism, which I have given above, illustrates this Leninist position precisely from the viewpoint of Marx's general theory of capitalist reproduction, as applied to the epoch of monopolism.

If I may beg the reader's pardon for rushing somewhat ahead of the theoretical exposition of the question in order to look at the concrete history of economic development over recent decades, I would like to make the following observation. I am inclined to think that because world capitalism passed from the epoch of free competition to monopolism approximately in the '90s, the crisis of 1893–1896 was still, in terms of its main features, a crisis of classical capitalism, whereas the crises of 1902–1903 and 1907 demonstrated transitional features in the direction of monopolism. However, the tempo of economic development during this period was still high, a factor partially explained by the cause we have already mentioned, that is, by the accumulation of fixed-capital reserves on the part of capitalist trusts. Before the world war, on the other hand, a crisis began to emerge whose basis lay in the process of transition from one set of conditions of proportionality to another. This transition, caused by the fact that the accumulation of fixed-capital reserves was more or less completed, made the problem of realization extremely acute for heavy industry. This was not simply a crisis of the monopolistic system, but one of *transition* from one tempo of economic development to another, slower tempo. It is perhaps this very fact which explains why capitalism reacted to this transition with such an extraordinary *intensification* of the struggle to redivide the world; that is, with the war, for which a sufficient number of more general causes had already been created by the system of imperialism. But the war itself, being connected with several of its own specific factors and events, introduced much that was new in the world's economic condition. Thus it muddled up, so to speak, the growth and resolution of a typical crisis of monopolistic capitalism, causing its characteristic features to remain hidden from us. From this viewpoint the crisis of 1930 is the most classical crisis of monopolistic capitalism: the crisis of 1920–1921 had specific postwar features, and the depression of 1924 did not develop into a serious shock to the entire world economy. That is why the crisis of 1930 is exceptionally interesting for a theoretical study and provides such a wealth of material for testing any theory of reproduction under monopolistic capitalism.

Now let us examine the final point, which has such great significance

for understanding the dynamic of industrial expansion under free competition—namely, the expansion of production as a whole beyond the limits of effective demand due to concentration, over a brief interval of time, of a feverishly rapid buildup of enormous masses of fixed capital. Let us see what changes occur in this respect under monopolistic capitalism.

Here two variants are possible:

A. *The first variant.* The unevenness of demand for fixed capital is such that the reserves of equipment available to trusts are sufficient to satisfy demand without any new construction of enterprises to manufacture fixed capital. In this instance the system of monopolism, in itself, does not permit an industrial recovery to lead to an expansion, even though an analogous growth of demand, in the epoch of free competition, normally ends with an industrial expansion and then a general crisis. Here the enlarged demand for fixed capital will be satisfied without any new construction. Those branches of industry that manufacture material and fuel, together with Department II, will experience a certain stimulus to expand, but by no means the sort of stimulus which might evoke an industrial expansion. Nor must we forget that these branches are similarly in the grip of monopolism—we are assuming the development of monopolism is quite far advanced—and have their own enormous reserves of fixed capital, with the consequence that they too experience no need for a rapid increase of fixed-capital orders. The same economic conjuncture, which in free competition, with its weaker reserves of fixed capital, in general and on the whole led to an industrial expansion and then a general crisis, is capable of evoking only an industrial recovery under monopolism, followed by a depression rather than a general crisis.

B. *The second variant.* The industrial recovery assumes a protracted character and does grow over into an economic expansion. Why this might occur is a matter we shall address below. For the moment let us consider how, in this case, the further course of events must develop under monopolistic capitalism.

Given the enormous reserves of fixed capital, which are inevitably set aside under monopolism like the fatty deposits of an aging organism, the process must develop as follows. When the recovery has lasted for some considerable time, demand for fixed capital being satisfied without any new construction and only by utilizing fixed capital more

fully, during the ensuing stage there begins a process of increasing these reserves and bringing them into correspondence with the level more or less normal and average for monopolism. In other words, *the capitalist system begins to develop its production apparatus as though the recovery now underway, with all its growth of demand for purposes of consumption and production, were a natural and sustained condition for the economy of society.* Even though all the original stimuli for recovery might by this time be exhausted, this supplementary demand for fixed capital will be the factor which both delays an inevitable depression and thereby also increases the chances that it will subsequently be transformed into a crisis. Should there remain any chance for the recovery to continue further, owing to the fact that its original causes are not yet exhausted, then the growing demand for fixed capital will impart even greater force to the industrial expansion.

In both cases, however, the result will be the same. When the fixed capital reserves of monopolistic capitalism have been raised to the "normal" percentage of capital immobilization in this system, then this supplementary market will be exhausted and the turn in the direction of a crisis will begin. Because this demand for additional fixed capital, under monopolism,is a demand for reserves and not for an increased supply of means of production at a time of speculation in the production apparatus of heavy industry—a time when, as in the case of an industrial expansion during the epoch of free competition, heavy industry is unable to achieve satisfaction of the expanded demand—it follows that the entire process need not be accompanied by a rise of prices for the production of heavy industry. Here we discover the second unique feature of an expansion under monopolism.

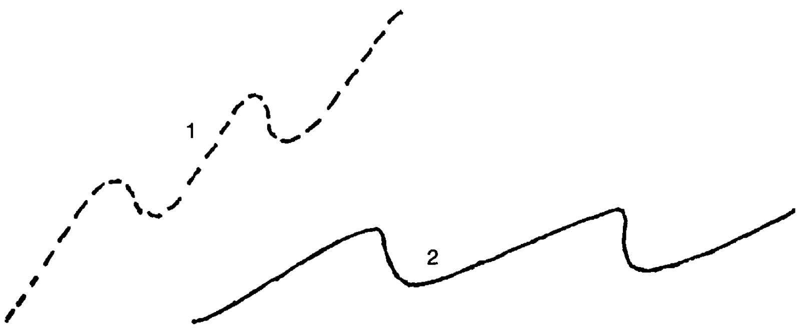
But once the descent into a crisis is underway, this process too must be essentially different from crises during the epoch of free competition. The first difference consists of the fact that an industrial expansion under monopolism, as will be seen from the foregoing discussion, can only occur after a lengthy preparatory recovery. A brief recovery will generally be smothered by the enormous fixed-capital reserves of all the trusts. However, a sustained recovery implies a far more profound adjustment of the entire system to the given volume of production, and therefore indicates that the crisis must cause considerably greater agony in shaking up the newly formed relations of proportionality. On the other hand, the crisis must strike like a bolt from the blue, without any warning, and thus be perceived as an inexplicable catastrophe.

The second peculiarity of a crisis under monopolism must be found in the fact that it cannot be alleviated by the same factor as alleviated all the crises of classical capitalism, more precisely, by introduction of a number of technological improvements into the production process of the most powerful and viable enterprises. Beginning with the introduction of the steam-driven loom in England after the crisis of 1825, all the crises of classical capitalism were accompanied by a more or less thorough reequipping of enterprises, creating demand for fixed capital at the very height of overproduction and in the very sector from which the crisis spread. In this manner water was poured onto the source and hearth of the conflagration. Under monopoly capitalism, however, there also occurs a relocation of *this type* of demand for fixed capital in terms of time. Now this demand emerges not at the pinnacle of the crisis, or as it is being overcome, but at the second stage of the industrial expansion, when the trusts are expanding their reserves of fixed capital and using the opportunity provided by this operation to replace their old equipment with new in the same process.

Thus the demand for new fixed capital, satisfying all the requirements of technology and incorporating all the results of technological progress over a given period of time—this same demand, which acted to alleviate the crisis under free competition, emerges under monopolism even *before the crisis begins*. The result is that the dimensions of the crisis are all the greater, just as the solution is more difficult and agonizingly slow, unless the crisis coincides by chance with some revolution or other in technology.

Now we must provide an answer to the question of where, in general, one might find a basis for a sustained recovery to emerge and grow over into an industrial expansion, for we have already seen that such an expansion can only come in the wake of a long period of economic recovery.

This is an extraordinarily difficult question, and I must openly acknowledge to the reader that I have not yet clarified it fully. From the viewpoint of a theoretical analysis of reproduction it is necessary to begin here by answering yet another question: that is, whether present conditions will even allow for a long recovery, growing over into an economic expansion, when the tempo of the world's economic development is charted by a cyclical curve different from the one which existed under free competition. With the use of a graph the entire process can be portrayed as follows:



1. The curve of the cycle in the epoch of competition.
2. The curve of the cycle in the epoch of monopolism.

Many variants are possible, of course, in the graphical exposition of the process, but the economic essence of the issue is clear. With a slower general tempo of the whole course of economic development, leaving aside the capitalist form of labor organization, the forward movement can be portrayed as one that is more or less smooth, one interrupted by cycles, or one involving a curve of completely arbitrary and irregular configurations.

The very structure of capitalism rules out movement in accordance with the first type of curve, which is characteristic neither of the stage of free competition nor of the stage of monopolism. We can only speak, therefore, either of movement along a curve with cyclical interruptions, or of movement along some kind of irregular curve, which lacks any periodicity of expansions and contractions. Insofar as a certain periodicity of cycles also exists under monopolism—a periodicity that does not appear to be fortuitous if we take 1907, 1914, 1920–1921, and 1929–1930 (leaving aside the particular fact that the crisis of 1914 grew into a war and the postwar crisis of 1920–1921 had its own specific features)—it follows that the question can be reduced, in the first place, to this: how can this periodicity be superimposed upon a slowly rising curve, or more accurately, upon a curve that is rising more slowly than in the epoch of free competition?

In this regard the following variants are possible:

1. The periodicity of the epoch of free competition is preserved in the sense of the length of cycles and the depth to which production

declines during crises. This variant is unrealistic, for if curve No. 1 is simply altered to include a slower movement to the point first of expansion and then of collapse, then every cycle will in fact be longer. Graphically, of course, one could imagine a curve wherein the average expansion corresponded to the tempo of economic development in the epoch of imperialism, crises would have the same depth as before, and their succession would occur in the same time frame. But that would not be the curve of economic development under imperialism, and it would remain unclear how such a type of movement might be economically possible.

2. Movement takes place along a curve that includes only periods of recovery (not growing into expansions), and periods of depression (which similarly do not lead to crises). This case is theoretically possible under monopolism precisely because of the enormous reserves of fixed capital in the hands of monopolistic trusts. Recovery would then signify utilization of a greater percentage of the *existing* fixed capital. But recovery would not grow into a general expansion, because the increase of fixed capital would be more evenly distributed over time than in the epoch of free competition and would not permit the movement to pass over into crisis.

This case is of no interest to us for two reasons: first, because real development occurs in a different pattern; and secondly, because we are obliged, for the reason just mentioned, to accomplish a different task—that is, to explain how it is possible to have a recovery *that does grow into* a general economic expansion.

3. The third possible variant is the one that follows. The length of the cycle increases, and the industrial recovery stretches out over a longer period of time, being interrupted by modest depressions. The transition to an industrial expansion is possible precisely because of the length of the cycle. In this case the growth of reserves of fixed capital occurs before the crisis begins, and this very process of expanding fixed capital might either convert the economic recovery into an economic expansion, or else suppress and temporarily delay the maturing crisis. In this variant the crisis erupts when the supplementary market, created by additional demand for fixed capital, turns out to be exhausted and causes the curve of reproduction in heavy industry to plummet downwards.

This third variant is also conceivable in another form, wherein the slowdown of the average tempo of development occurs not so much because of the curve's decelerating rise at the apogee of the expansion,

as because of deeper declines in periods of crisis. It is perfectly obvious that this form of movement would be the most dangerous for the capitalist system, and especially for its weakest links, because it would intensify the system's social contradictions in the extreme.

The third of the variants that we have described appears to be the one most typical of reproduction under monopolistic capitalism. Now it only remains for us to investigate how such a form of movement might occur in conditions of the uneven development of capitalism on the scale of the world economy.

The reader will be aware that Marx, in his analysis of the process of expanded reproduction under pure capitalism, made several simplifying assumptions. Thus he began with the assumption that capitalist development occurs evenly; or more accurately, he eliminated in general the problem of unevenness on the part of such development. Because our ultimate objective is to arrive at a concrete analysis of capitalism's history during certain specific periods of development, we cannot remain at this stage of the investigation. As the reader will recognize, we have already carried our study closer to the conditions of concrete capitalism in a number of places. We have done so in part by relying upon individual observations by Marx concerning the theory of crises, as they occur in different places in his work, and in part by developing certain of his general propositions conerning the theory of reproduction. Later we shall have to develop these conclusions from the Marxist theory of crises in greater detail. But for the present we must emphasize, above all, that we do not assume amortization of the fixed component of constant capital over one year; instead, we differentiate between amortization of the fixed portion of constant capital, which occurs over longer periods, and replacement of the circulating portion of constant capital (including materials, fuel and auxiliary materials). In the propositions developed here concerning the theory of crises, as well as in our more detailed schemes of the capitalist cycle, we begin precisely with the unevenness of replacing and expanding fixed capital. This unevenness was not only pointed out by Marx, but also provided him with the explanation of the periodicity of crises. He did not, however, develop his position on this matter, nor did he illustrate it with the same schemes as he used in Volume II of *Capital* to demonstrate the law of proportionality in reproduction. At this point his work proved to be incomplete, and not a single Marxist has undertaken to continue it.

In what follows we assume the existence of reserves of fixed capital in capitalist production, a factor which changes the conditions of

proportionality at the very moments of depressions and crises. On the other hand, as we have seen already, the problem of increasing reserves of fixed capital under monopolism is exceptionally important for understanding the whole system of reproduction under imperialism.

In addition to the theory of simple and expanded reproduction, we then investigate the problem of declining reproduction, a question of exceptionally great significance for a country such as present-day England, where there has been a dramatic collapse of economic activity.[12]

We then make an effort to investigate the problem of simple and expanded reproduction under concrete capitalism, or in circumstances where there also exists a sector of simple commodity production.[13]

After such a considerable approximation in our study to the relations of real capitalism, including a differentiation between its two historical stages, the epoch of free competition and the epoch of imperialism, we must still take one further step toward reality: to be precise, we must assume the uneven development of capitalism. The law of capitalism's uneven development, to which Lenin assigned such prominence in his whole theory of imperialism, has overriding significance not only for a study of the concrete world economy in the epoch of imperialism, but also for a *theoretical* analysis of expanded reproduction under monopolism. General methodological considerations require this law to be incorporated into the investigation.

We have already indicated that a national economy, taken in abstraction from its ties to the world market, cannot serve as a starting point for an analysis of the economics of imperialism. The system of monopolism is integrally connected with a far-reaching development of the world economy as a single economic entity, and this is true both in concrete historical terms and also in terms of an internal, one might say a structural, connection. Just as it would be foolish in the study of a national capitalist economy always to begin with a separate capitalist enterprise—foolish because a single enterprise does not allow us to analyze thoroughly all the laws of the entire system—so it is impossible to study the laws of monopolism in a separate national economy. These laws can only be revealed by an analysis of the world economy, taken more or less as a single economic organism. I shall not dwell upon this question at any length in the present context, for it requires a special study.[14] I shall only point out that within the limits of a national economy it would be impossible to study not only the theory of reproduction under monopolism, but also such questions as the following: the distribution of accumulation, in particular the export and import of capital;

the emigration and immigration of labor power; the average rate of profit; changes of the value of gold and of world commodity prices; the rate of interest, and many other questions—not to mention the problem of capitalism's uneven development and the influence of this factor upon the tempo of the reproduction process in the individual components of the capitalist system.

But if we do incorporate into the study both the fact and the law of capitalism's uneven development, the inevitable result will be that the process of expanded reproduction can and must develop unevenly. That will be true not only because of the cyclical form of movement, which characterized previous capitalist development, but also because of different tempos of movement in separate parts of the world economy. In this respect Lenin made a very important contribution to the Marxist theory of reproduction, particularly when this theory is applied to the epoch of monopolism. Of course Marx possessed an excellent understanding of how significant this aspect of the matter was, even for classical capitalism. But for a study of classical capitalism, in its pure form, this condition did not possess the same importance as in the epoch of imperialism.

When we come to consider the law of capitalism's uneven development, the entire problem, on the one hand, becomes more complex; but on the other hand, it also becomes easier to answer the general question of how it is possible, under monopolism, to have a long period of recovery which grows over into an economic expansion and the ensuing crisis. In a roughly simplified form the matter could be presented this way. With a general slowdown of the tempo of economic development throughout the world, at some points development comes to a general halt, or perhaps even a regression occurs, as in England. In a second group of countries relations are established similar to those of simple reproduction (in the sense of the physical volume of production as a whole, but not in the sense that the countries in question consume their entire income, without accumulating abroad and without directing this accumulation into other countries, which are absorbing new capital). And finally, in a third group of countries, such as France, South America, certain colonies, and especially the United States, the tempo of economic development proves to be in excess of the world average. It is precisely thanks to such unevenness in the tempos of movement that separate parts of the world entity can experience the conditions needed for a full-bodied recovery, leading to an expansion, in spite of an opposing factor in the form of an accumulation of enormous reserves

of fixed capital. The growth of world purchasing power, as the fundamental limit to expanded capitalist reproduction, is unevenly distributed between individual capitalist countries, causing an increased tempo of forward movement at some points, at other points a cessation of all movement. The result is that we get not just a simple cyclical form of movement on the part of the entire system, but rather movement in one part of the whole, accompanied by a slower movement or even regression in other parts. Although this movement occurs over time in the form of cycles, the cycles themselves ar characterized, so to speak, by differing contents.

4. Monopolism in the System of Supply. Unproductive Consumption

A transformation of the character of the capitalist cycle depends also upon changes occurring during the epoch of monopolism in the capitalist system of exchange. The theory of monopolism must begin with the fact that in addition to the monopolistic associations that embrace the main branches of production, transport and the credit system, monopolism is found as well in the network of commodity distribution. By no means are we introducing this assumption into our investigation in order to "round out" our methodology: on the contrary, monopolistic associations in the area of supply play an enormous role in real life and exert an essential influence upon the production process. Most of the retail trade network is subordinated to the supply giants of New York, London, Paris, and many of the provinces; it represents a kind of service, acting on behalf of these associations, and is being converted, in varying degrees, into simple retail divisions of the supply monopolists. The retail network does not, in any sense, follow an independent trade policy. In wholesale trade there are likewise few points of genuine competition. Cooperatives do not follow their own trade policy, but are subordinated to that of the supply monopolists. Trade policy, as such, is formulated precisely by these monopolistic associations. The simplicity and clarity of their policy consists of endeavoring to raise retail prices when the factory price rises, and to maintain the former price

when the factory price falls. The considerable success which the supply monopolists enjoy in implementing such a policy is vitally significant to the whole production process. A reduction of factory wholesale prices either is not passed on to the consumers, or else is passed on only in part and the final result is to redistribute surplus value between the production capital of the monopolies and monopolistic trade capital. Thus when overproduction occurs the production monopolists, as we have already seen, continue over a long period to sell the redundant mass of products without reducing prices. Instead of reducing prices the trusts are more inclined to curtail production, thereby creating *the first cause of the thrombosis in the process of expanded reproduction.*

When the depression assumes serious dimensions and grows over into a crisis, the producing trusts do lower prices; but in most cases the only result is competition between the industrial trusts, who are selling their production, and the monopolists of supply, who are purchasing it. The supply monopolists do not allow the price reduction to extend into retail trade. *In this connection there emerges a second barrier to expanded reproduction.* If a volume of products, equal to a thousand commodity units in natural form, is sold by the producing trusts not for a thousand monetary units, as before the crisis, but perhaps for eight hundred, then in the retail stage (if we assume the average mark-up to be 30%) this thousand units of commodities is now sold not for one thousand and forty, as should be the case, but for the same one thousand three hundred as was previously charged. Hence the surplus commodities cannot be absorbed by way of lowering the price charged to the consumer, and the consumer himself usually has even less purchasing power at his disposal due to a decline of production on the part of the trusts and curtailment of the wage fund.

This second barrier of monopolism is added to the first and reinforces even further the tendency to restrict production, narrow the market, and immobilize both the capital and labor power of society.

But insofar as the accumulations of the supply monopolists, given a general obstruction of the reproduction process, cannot be devoted to the expansion of production, they are necessarily transformed into a source of unproductive consumption in the capitalist system. Instead of using this surplus value to increase production and thereby to expand the capitalist market, creating the sources of even larger profits in the following stage of the production process, monopolism hunts for sales opportunities by extending the supply apparatus; in other words, the whole system unproductively consumes an ever-growing portion of

society's income, which now is devoted to inflating the trade network. This is the explanation of a phenomenon reflected in the statistics of all countries, especially those of the United States; namely, an astonishing growth of the cost of circulating commodities together with what appears, at first glance, to be an inexplicably rapid increase of all categories of salaried employees at the expense of wage workers who are productively employed in the enterprises.[15]

The causes and consequences of this entire process are frequently misunderstood in the economic literature. It appears to many observers that the reason why contemporary capitalism develops the production process more slowly than in the past is the fact that the unproductive consumption of the capitalist system is growing too quickly. In reality the causal dependence is just the reverse. It is precisely the thrombosis in the process of expanded reproduction, arising from the very structure of monopolism in the sphere of production and distribution, which makes it impossible for surplus value to go into enlarging the wage fund for productive workers and requires that it be used instead to increase the wages of distribution agents of every description.[16] If the slowdown of the process of expanded reproduction were caused by unproductive consumption, then it would follow that the epoch of monopolism would entail a systematic deficit of new capital. In reality we see that just the reverse is true, the only exceptions being individual sectors of the capitalist system, whose circumstances arise from their own specific causes.

In our chapter dealing with the crisis of 1929–1930 we shall provide a considerable volume of statistical evidence to document the position we have formulated here.

5. General Results

Let us summarize briefly what has been said thus far.

The fundamental obstacle to society's economic development, given a capitalist system of labor organization and distribution—in other words, the fundamental Achilles heel of capitalism at every stage—is a blockage of the process of expanded reproduction. This condition, which inevitably means limited consumption by the toiling masses,

arises from the structure of capitalism itself, as production for the market, with its private character of distributing both the income to be consumed by society and all the means of production and accumulation.[17] Both use of the potential productive forces and allocation of those now in existence (including new accumulation) is subordinated to the goal of acquiring a certain norm of profit. In this kind of structure the productive forces are squeezed through too small an aperture and the production possibilities always exceed the carrying capacity of the system. All the economic processes of commodity production are spontaneous, so that the entire system, with respect to development of its production apparatus, is made dependent upon spontaneous impulses, whose intensity is proportional not to the material possibilities of production but to prospects for realization in conditions guaranteeing receipt of the average norm of profit. Notwithstanding all its other advantages over precapitalist forms, in this respect the capitalist system is considerably less elastic than, say, the feudal system of production and exploitation. Feudal production and feudal exploitation are possible even when the absolute minimum surplus product is alienated from the producers. The superiority of socialist production, as consciously planned production for the sake of consumption, is immeasurable when compared to capitalism in this respect.

Under free competition, however, this fundamental (or generic) flaw of the capitalist system is weakened and alleviated by several causes, the most important being the following.

1. A balance of forces more favorable to the proletariat in terms of the relation between labor power and capital on the labor market, resulting in pressure from the workers to raise wages. Acting as a kind of external force, this pressure drives capital in the direction of more rapid technological progress. Such progress, in turn, increases the productivity of labor and the volume of commodities produced, enhances the demand for functioning fixed capital, and causes a more rapid expansion of capitalism's own internal market when compared to the general volume of production at any given moment. In these circumstances the overall tempo of development becomes more rapid, and the causes and effects of the more rapid advance turn out to be intertwined.

2. For both technological and economic reasons the concentration of capital and the increasing scale of enterprises were much less significant than under monopolism; in other words, the establishment of new enterprises was much easier. In conditions of free competition this

meant more intensive spontaneous impulses to pursue profit by way of expanded reproduction. It was easier to break free of the existing stage of reproduction, with the proportions it entailed, and to move in the direction of another, higher stage.

3. A much lower percentage of fixed-capital reserves in the system as a whole. Given the uneven distribution over time of orders for fixed capital and their completion, lower reserves meant that even though the system experienced periodic expansions and crises, it was nevertheless able to make use of almost the entire available equipment and labor power during the period of expansion, or when the production capacity of society was most strained. Over a period of years, therefore, the average utilization of society's productive forces was higher than under monopolism.

4. Fewer difficulties in the redistribution of capital from one branch to another through the price mechanism, due to a lower percentage of capital being locked into the form of fixed capital and to the greater elasticity of the market in conditions of free competition.

5. Greater opportunities for the system's progressive adjustment to cyclical price reductions by way of selecting the most viable enterprises and reconstructing them. Reconstruction created demand for fixed capital towards the end of the crisis, mitigated its effects, and offered greater opportunities for the whole system to emerge spontaneously from its critical condition, led by the branches manufacturing elements of fixed capital.

6. The existence of territories as yet unoccupied by the capitalist system of production and exchange; expansion of capitalism's territory at the expense of small-scale production; opportunities to invest fixed capital in backward countries in the form of railroad construction; and increased sales of additional small quantities of surplus articles of consumption. Although these sales did not constitute the *basis* for realizing new surplus value within the capitalist countries (as Rosa Luxemburg mistakenly believed), they did allow a temporary breathing-space in periods of especially serious overproduction. In this manner they made it easier to rise to the next level of expanded reproduction and thereby to expand *the basic market*, which exists within capitalism itself.

7. The absence or weakness of monopolistic associations in the supply system, with the consequence that lower wholesale prices, charged by the producing enterprises, were quickly passed on through retail trade, ensuring both a decline of the cost of living and the overall

possibility of the system's more rapid adjustment to falling prices through improvements to the equipment.

Capitalism's transition to the higher historical stage of imperialism occurs under the influence of the concentration of capital and the merger of industrial with banking capital. Bringing with it the expansion of individual enterprises due to changes in their technical structure, this transition at the same time forces the capitalist system into a slower tempo of economic development. It involves essential changes both in the general conditions of expanded reproduction and in the character of economic expansions and crises. All of these changes flow from the economic structure of monopolism, from modifications of the entire social nature of capitalist society at this stage, and particularly from a shift in the balance of class forces between the proletariat and the class of capitalists. Without understanding these peculiarities of the economic and general social structure of monopolism, together with the extent of their direct influence upon the reproduction process, it is impossible to understand either the specific requirements of proportionality under imperialism or the unique character of its expansions and crises. In short, it is impossible to understand the whole nature of the capitalist cycle and how it has altered. In order to clarify the special features of imperialism, the best way to proceed is by systematically comparing the conditions of expanded reproduction and crises under monopolism to those prevailing during the epoch of free competition.

But since imperialism is the final stage of capitalism, a stage in which the rebellion of society's productive forces against the capitalist organization of labor and the capitalist system of distribution becomes especially acute, problems of a social-historical character inevitably intrude upon an economic analysis. One must, therefore, not only explain differences in the reproduction process at various stages of capitalism's own development, but also provide a comparative analysis of capitalist and socialist reproduction, on the one hand, of capitalism and those social formations that existed prior to commodity production, on the other.

The basis of such an investigation must be the results achieved by Marx in his study of the problem of reproduction in *Capital*, Volume II; the separate parts of his work wherein he addressed the question of crises; and also his general analysis of the capitalist system, which he saw as a form whose content was a certain level of development of mankind's productive forces, interpreted as a process. But Marx's theory of crises was incomplete, and his theory of reproduction must be

developed and worked out in the sense of bringing the analysis closer to the conditions of real capitalism. This effort, to begin with, involves establishing the characteristic features of the reproduction process in the epoch of classical capitalism and in the epoch of monopolism. Further concretization will entail elucidating such problems as those associated with fixed capital, with reserves of fixed and circulating capital, with changes in the organic composition of capital, with changes in conditions for the sale of labor power, and with including the periphery of small-scale, precapitalist production in the study. In addition, the starting point for such a study must be the world economy, not a national economy. It must also begin by taking into account the action of capitalism's law of uneven development, and by implication, its law of uneven decay. This requirement creates a need to work out not only the theory of simple and expanded reproduction, but also the theory of declining reproduction, whose purpose is to clarify the conditions of reproduction in countries experiencing economic regression. The study must incorporate the deformation of the law of value, together with the interweaving of monopolistic tendencies and free competition, and must further trace the influence of these essential changes upon the general conditions of expanded reproduction and crises in the epoch of imperialism. The work cannot begin with a tacit assumption that capitalism possesses an internal tendency to expand and an ability in fact to do so, but instead must thoroughly analyze the causes of a progressive deceleration of economic development, an issue that inevitably goes beyond a purely economic analysis. Finally, the investigation must trace what influence the existence of the USSR has exerted upon the process of capitalist reproduction.

Undertaken from all of these different viewpoints, our investigation leads to the following results.

1. In monopolistic capitalism the balance of forces in the economic struggle between the proletariat and the capitalists takes shape in a way which is less favorable for the sale of labor power in the market. This new balance is caused by several factors: by the growth of absolute (or what is more frequently referred to as structural) unemployment; by a closer merger of trusts with the state; and by subordination of the reformist trade-union bureaucracies to the monopolies. The main result is a reduction of the external pressure exerted upon capital in the direction of more rapid technological improvement. On the other hand, the end of wage increases, or even a lowering of the wage level, weakens the stimulus in favor of expanded reproduction because it

eliminates expectations of further growth of society's effective demand and thereby spontaneously pushes the entire system towards the level of simple reproduction. In this regard it becomes particularly evident that a study of the problem of reproduction and crises under monopolism must proceed beyond the limits of a purely economic analysis.

2. The enormous concentration of capital in the hands of monopolistic trusts, in accordance with the very essence of monopolism, leads to a situation wherein the trusts endeavor to satisfy not only the entire current demand for their production, but also future demand, including the increased demand coming from an economic recovery or even an expansion. They are therefore compelled to have enormous reserves of fixed capital, a circumstance that kills any possibility of constructing new, competing enterprises, even in a period of expansion. The increase of fixed-capital reserves, on the other hand, is rendered both economically inevitable and materially possible by the slowdown of the tempo of economic development. In summary, this tendency signifies immobilization of enormous masses of fixed capital; it is organically linked with the most essential features of monopolism; and along with the immobilization of labor power it characterizes most vividly the retardation of the entire tempo of society's economic development.

3. In conditions of free competition the very same pursuit of profit served as the immediate stimulus of economic activity. However, in periods when supply exceeded demand it led to price reductions, without any curtailment of production, and imposed adjustments to a sustained price decline by way of technological improvements. Under monopolism, in contrast, the first reaction to curtailed demand is to curtail supply, without lowering prices, and then to cut back production. The system of monopolism is driven to reduce prices only in periods of acute crisis. All of these circumstances serve to restrain the process of expanded reproduction and thereby to reinforce the tendency in the direction of simple rather than expanded reproduction. When demand increases there is no new construction, only more intensive use of existing fixed-capital reserves and the reactivation of technologically backward enterprises, previously held in storage.

4. The effect of the condition just mentioned is to retard technological progress. Dictated in part by reasons mentioned in paragraph one, this slowing down of technological progress is also connected with another influence; that is, the fact that individual trusts, by concentrating in their hands enormous masses of fixed capital, frequently find it unattractive to make use of such technological improvements as will

inflict moral wear upon large amounts of fixed capital. The absence of competition, along with concentration of technological research in their own laboratories, makes it possible in practice to freeze innovations in this manner. On the whole such practices diminish the extent to which technological progress is implemented when compared to the level of scientific development and the material dimensions of production. What this means, from the viewpoint of expanded reproduction, is a relative slowdown of the growth of demand for fixed capital in any given period of time, or a relative narrowing of the market for means of production.

5. From all of the foregoing changes there inevitably results a change in the character of the reproduction process under monopolism, as compared to the epoch of free competition—a change in the character of an economic recovery, of an expansion, of depressions and crises, which on the whole means a change in the character of capitalist cycles. When enormous reserves of fixed capital already exist, economic recovery is rarely able to develop automatically into economic expansion. If individual countries do experience more prolonged periods of recovery, due mainly to capitalism's uneven development on a world scale, then it will be possible for such recoveries to lead to expansion. However, the character of both the expansion and the ensuing crisis undergoes essential changes when compared to the epoch of free competition.

6. Among such changes are included the following. A sustained recovery in one part of the world economy, resulting from a decline of markets and the tempo of development in another part, at a certain stage leads to the intensive growth of demand for fixed capital insofar as monopolism spontaneously raises reserves of fixed capital to the level characteristic of this system and in accordance with its structure. Should the transition to this stage of the reproduction process take place at a time of impending depression, it might cause the depression to be superseded by an expansion, having no apparent cause in terms of production of either articles of consumption or elements of the circulating portion of constant capital.* If the increased orders for fixed capital, intended to serve this purpose, begin to appear prior to the depression, their effect might be to make the process of development proceed more smoothly. But this same fact will also cause the ensuing crisis to be more acute and completely unexpected by the "world of business." A second unique feature of this type of expansion might be the absence of price increases, a phenomenon explained by the fact that there is no deadline or rush in the expansion of fixed capital nor any need for the

feverish construction of new enterprises for its manufacture. On the other hand a decline of prices that were not brought back into line by the previous crisis might simply return the index to the precrisis level, provided no changes are required by long-term adjustments in the conditions of gold production.

7. Because of the foregoing causes the emergence from a crisis must inevitably take longer and assume a more *agonizing* character. In this respect the contrast with the character of the capitalist cycle under free competition is quite remarkable. Under free competition the replacement of equipment in the most powerful enterprises (together with renewal of fixed capital in the gold industry) serves as a very important spontaneous impulse for alleviating the crisis at the very moment when it breaks out. Under monopolism the increased demand for fixed capital, resulting from the expansion of production, occurs not at the peak of the crisis, but before it even begins. Thus the capitalist system loses a very important stimulus, in terms of both timing and magnitude, for either ending the crisis or facilitating its transition to a depression. The loss of such stimuli for expanded reproduction, given the weakening of other such stimuli, has an entirely negative effect upon the capitalist system. Speaking of the system's tendencies in their pure form, one would have to say that an economic crisis under monopolism has a tendency to reduce both the production apparatus and the volume of production to the level which existed before the recovery began.

8. To the extent that the system of monopolism also embraces the sphere of circulation, in periods of crisis and falling wholesale prices the monopolistic associations of commercial capital employ every means to prevent a proportional fall of retail prices. Thus the capitalist system experiences all the difficulties associated with falling prices but none of the benefits. The consumption fund of society is able to purchase no more than the previous quantity of commodities for the same sum; the failure of prices to decline in retail trade prevents the physical volume of demand from increasing; and the result is a prolonged crisis in which there occurs an enormous increase of profits going to the parasitic organizations of commercial middlemen.

9. Monopolistic capitalism brings with it a growth of unproductive consumption. The opinion is quite widespread that the slowing tempos of economic development under monopolistic capitalism depend upon an increase of unproductive consumption. That is not true, insofar as the effect is in this instance interpreted to be the cause.

It is not the slowdown of economic development that is caused by the

growth of unproductive consumption in the capitalist system; rather the growth of unproductive consumption is caused by the slowdown of economic development, which in turn results from the change of capitalism's structure.[18] With such a slowdown it is pointless to convert a greater portion of society's income into capital, for not even the existing accumulation can be utilized fully, given the narrowing of the arteries needed to take advantage of society's productive forces. This circumstance is particularly significant in explaining both the growth of expenditures in the system of commodity circulation and the more rapid increase of salaried employees than of workers, even in countries enjoying rapid industrial development such as the United States and others.

In the foregoing exposition we have described the fundamental and most characteristic features distinguishing the economic cycle under free competition from that under monopolism. Having offered these general observations, we are now in a position to give a more thorough and systematically developed scheme of the economic cycle under both free competition and imperialism. In our account we shall use arithmetic illustrations of the type employed in Volume II of *Capital*. However, an arithmetic illustration is not the same thing as proof, and I must emphasize in advance the conditional character of these examples. I use them, first, for clarity of presentation, and second, because a reader literate in Marxism is already familiar with this form of presentation and will therefore find it easier to assimilate all of the complex *subject matter* with which one must deal in the theory of reproduction.

PART THREE

6. A Scheme of the Economic Cycle under Free Competition

Let us begin with an average year, in which production develops in conditions of proportionality between departments I and II and fixed capital is reproduced only to the extent of the annual wear. Subsequently we shall assume uneven expansion of fixed capital over time, requiring that we carry the analysis further than Marx's schemes in Volume II of *Capital* by incorporating a division of constant capital into its fixed and circulating components.

Let us suppose that the entire fixed capital of Department I equals 10,000 million provisional units of value, of which 2,000 are held in reserve. The wear of fixed capital will be taken, on average, to be 10% of the entire fixed capital each year, or 1,000. Let the circulating component of the constant capital be 3,000, and the variable capital 1,000.* The norm of exploitation is 100, the norm of accumulation one-half of the entire surplus value created in the course of a year. The fixed capital of Department II is 3,750, of which 750 are in reserve, and the annual wear of fixed capital in this case too is 10%, or 375. The circulating part of the constant capital is 1,125. The variable capital is 375. All other conditions are the same as in Department I. Expressed in figures, the entire social capital will be distributed as follows:

Department I

Fixed capital 10,000 (2,000 in reserve)
4,000c (1,000 fixed[19] + 3,000 circulating) + 1,000v

Department II

Fixed capital 3,750 (750 in reserve)
1,500c (375 fixed + 1,125 circulating) + 375v

Results for the year:

I. 4,000c + 1,000v + 500 accumulation fund
+ 500 consumption fund of the capitalists

II. 1,500c + 375v + 187.5 accumulation fund
+ 187.5 consumption fund of the capitalists.

Gross production in Department I is 6,000, in Department II, 2,250, and total annual production is 8,250.

Now let us suppose that Department I must satisfy an order for new fixed capital in the amount of 1,500; that is, somewhat more than 10% of the whole existing fixed capital of society, or somewhat more than the entire annual wear of fixed capital.

The question is: how, and in what time period, would it be possible to fill this order with the existing supply of fixed capital and its existing distribution?

A brief glance at the scheme will indicate that this task cannot be completed quickly (in one and a half or two years, for example) because the existing distribution of fixed capital is geared to completely different magnitudes of demand for fixed capital. The only two sums that could go to satisfy the order for fixed capital would be: 1) that portion of the accumulation fund of Department I that exists in the natural form of fixed capital, in this case 125; and 2) the corresponding part of accumulation in Department II, intended to increase II's fixed capital, in this case 47.*

Completion of the order would therefore require approximately 9 years. An inflow of newly absorbed labor power into the production of fixed capital is not possible if we assume a constant relationship between the magnitudes of fixed and circulating capital being produced. It is perfectly obvious, however, that the capitalist system, always limited by effective demand and using every opportunity to expand the market, cannot respond to the order by stretching its completion out over 9 years, all the more so in conditions of free competition.

In reality the process will occur quite differently: to be more precise,

it will involve using every production opportunity to fill the order in *the shortest possible time* and in the following manner.

To begin with, all the reserve equipment of enterprises manufacturing fixed capital in Department I will be brought into operation. Second, in these enterprises second shifts will be taken on, and third shifts wherever possible, so that the same amount of fixed capital can rapidly absorb a mass of new workers into production. In the third place, either in the very first year of the expansion or somewhat later, new enterprises will begin to be constructed for the manufacture of fixed capital. And fourth, because of the inevitable increase of demand for the natural elements of circulating capital (raw materials, fuel, etc.), the reserve equipment of enterprises engaged in such manufacature will also be brought into operation (including the fuel industry, metallurgy, the lumber industry, production of building materials, etc.). In general terms, if we take an ideal variant of the development of Department I, the basic tendency will be an inclination to use the accumulation fund of this department to the maximum extent for purposes of increasing variable capital, while the existing fixed capital will be used to the limit. The same tendency implies that all reserves of circulating capital, in their natural form, will likewise be used to the limit; reserves of coal, metal, and so forth, carried over from a year of average activity into the year of expansion, will be reduced to a minimum.

However, use of the entire accumulation fund of Department I in order to increase its variable capital requires a corresponding increase of cII: I's accumulation fund (500s) and its wage fund (1,000v) have the natural form of means of production and must therefore be exchanged for a corresponding quantity of means of consumption, produced in Department II and valued at 1,500. This is the first obstacle to using the entire accumulation fund of Department I in order to expand variable capital.

The second difficulty in achieving such a maximum development of production of means of production is the fact that the increase of v in Department I, from 1,000 to 1,500, requires cI to rise from 4,000 to 6,000 if all the relations remain constant.

What reserves might the capitalist system use in Department I in order to achieve even partial fulfillment of this objective?

The first reserve is that of fixed capital. If the entire fixed capital of Department I had been fully utilized even before the economic expansion, and work in the enterprises had already continued round the clock, then in order to increase variable capital from 1,000v to 1,500v a

prior increase of fixed capital by one-half would be needed, something which would be economically impossible. In order to create 1,500 worth of new fixed capital the capitalist system would first have to produce 5,000 worth of fixed capital as the necessary technical-economic precondition for satisfying the order.* But this task can be completed, for the most part, because of the availability of reserves of fixed capital and the possibility of going over to several shifts (which is essentially another form of reserve of the same fixed capital). Thus the value product, to the extent that it consists of the value of wear of fixed capital, grows in our example from 1,000 to 1,500—and does so without any rapid new investments in fixed capital. In this manner the difficulty is more or less resolved without creating any particular problems.

The next difficulty consists of the need to raise the circulating portion of constant capital from 3,000 to 4,500, or by one-half.** This can only be done if the capitalist system possesses 50% reserves of circulating capital in natural form—in this case reserves of fuel, metal, wood, and auxiliary materials, to serve as raw material in heavy industry. In the conditions that characterize an average year of economic activity such supplies are considerable, although they will vary, of course, from one type of means of production to another. For example, physical reasons will prevent coal reserves from reaching one-half of a year's supply (spontaneous combustion, shortage of storage space, etc.), whereas in the case of other fuels the reserves can be more substantial, oil being a case in point. The same holds true of metals, especially nonferrous metals. On the whole, however, such reserves can scarcely reach 50% of annual production under normal circumstances. The obstacle*** posed by circulating capital is more substantial than those arising from fixed capital, when the objective is to achieve a maximum development of production of means of production. But here too it is possible to have a considerably more rapid expansion, provided there are no difficulties with fixed capital and it is possible quickly to mobilize the new labor power required. The enterprises involved are mainly in the extractive sector, which either needs no raw material or provides its own, as is frequently the case when the metallurgical industry possesses its own iron mines. In any event, in order to increase the circulating portion of constant capital by one-half, it is by no means necessary to have on hand one-half of a year's supply in those types of production where output can be increased at any time of year. Matters are different with the production of such materials as cotton and technical crops, or with the laying-in of peat, seasoned wood, etc., for here a

sudden expansion of production can only be based upon the reserves of a single season.

Taking into account all of these possibilities and difficulties, one can say that although the capitalist economy has a tendency, given a sudden upsurge of the tempo of reproduction, to expand variable capital by the full sum of new surplus value, nevertheless this objective cannot be realized fully. For purposes of simplification, however, we shall assume that this tendency is 100% fulfilled.

Now let us look at how matters stand in Department II, once the distribution of capital in Department I becomes 6,000c (1,500 fixed + 4,500 circulating) + 1,500v.

If we assume that the consumed portion of surplus value continues in the same ratio to accumulation as before, then Department I demands from II means of consumption valued at 1,500v + 750 (the capitalists' consumption fund), or in the amount of 2,250. Such an enormous increase of production is only possible in Department II if here too the entire accumulated portion of surplus value, in the amount of 187.5, is added to variable capital. In terms of the natural composition of these values such an addition is easier for Department II because the 187.5s already consists of means of consumption and can be used directly to expand variable capital on the basis of exchange within the same department.

The obstacles to such a rapid development of production in Department II arise from the fact that an equally dramatic increase of constant capital is required. As far as fixed capital is concerned, the problem can be resolved by using direct and hidden reserves in the exact same way as was done in Department I. The major difficulty arises with the circulating component of constant capital: in the first place, apart from the transitional reserve, it consists of means of production that must be acquired from Department I; and second, what is involved to a great extent is material of agricultural origin, so that quantitites cannot be increased as quickly as coal or metal without waiting for a new agricultural year and a new harvest. Even so, the transitional balances from year to year are very large, and frequently do reach 50% of the annual production, as the statistics of commodity reserves indicate.

In any event, let us assume that this problem is fully resolved for both departments. We shall then have the following results of a year's work in the two departments.

Department I

10,000 fixed capital—
6,000c (1,500 fixed + 4,500 circulating)
+ 1,500v + 750 accumulation fund
+ 750 capitalists' consumption fund

Department II

3,750 fixed capital—
2,250c (562.5 fixed + 1,687.5 circulating)
+ 562.5v + 562.5s, of which one-half is accumulated and one-half goes to the capitalists' consumption fund.

Thus in Department II the 562.5 of fixed capital, entering into the value of the gross product from the side of constant capital, can only be acquired through more intensive amortization of fixed capital. In this case too it would not be possible to achieve such a rapid development of production or such an increase of the gross product, were it not for direct and hidden reserves of fixed capital together with a corresponding development of production in Department I.

The economic rationale of such efforts to utilize both older fixed capital and reserves of circulating capital lies in the fact that they permit the greatest possible mobilization of living human labor—which alone can create new values, but not without all the necessary material elements of production.

From this example we can see that reserves of fixed and circulating capital are vitally necessary to the capitalist system: they provide a capitalist economy with the elasticity it requires in periods of rapid cyclical expansion of production. Without these reserves the existence of mass production for the market would be completely impossible, as would any rapid expansion of the system's production apparatus. In the Marxist literature devoted to the theory of capitalist reproduction this question is not, unfortunately, given the attention it deserves. If Marx abstracted from this circumstance in the first stage of analyzing the process of expanded reproduction—while still having an excellent understanding of its importance for the theory of crises[20]—it by no means follows that Marxist thought must come to a halt at the point where the investigation was interrupted by Marx's own sickness and death. By

using schemes with such a high degree of abstraction as to ignore the role of reserves, the wearing out of fixed capital over more than one year, the uneven renewal and expansion of fixed capital, and finally, the influence of capitalism's uneven development upon reproduction—by using schemes involving such apprentice-like timidity and such inability to carry forward Marx's interrupted study, it proves impossible to understand the development either of a single typical capitalist cycle or a single real capitalist crisis. But we shall return to this matter in another place.

Returning to our example, we see that the task of creating new fixed capital in the amount of 1,500, or somewhat more than 10% of the fixed capital of the entire system, cannot be completed in the course of a single year, even with the most intensive development of production and the most ideal distribution of all social capital with respect to this goal. Insofar as it is a question of creating new values, and not of converting old fixed capital into new, it follows that for fulfillment of this task the system has at its disposal the following: first, 750s in the accumulation fund of Department I, presupposing that in Department I the appropriate distribution of labor will be attained between branches manufacturing elements of fixed and circulating capital, so as to benefit the former; and second, whatever fixed capital can be freed by Department II, which in selling 2,250 means of consumption can temporarily reduce its purchases of elements of fixed capital and convert its amortization deductions into money capital, in order to cover the loss of fixed capital at a later point, when it is in greater supply at a lower price.[21] For reasons to be explained below, opportunities of this type are not extensive, and this circumstance, incidentally, is extremely significant for understanding the dynamic of capitalist cycles and for measuring the resources available to the capitalist system for a sudden and dramatic expansion of production. On the other hand, this "loan," if one may call it such, while facilitating a rapid expansion of production, inevitably shifts the demand for fixed capital to other years of the cycle, with the consequence that Departments I and II prove to be in different circumstances as regards the reconstruction and expansion of fixed capital. This consideration does not apply, of course, to reconstruction of that portion of fixed capital without which Department II would be materially unable to achieve its expansion, and the example, for that reason, will not suit the case where the order for fixed capital originates in Department II.

It is true that the system still has one further reserve at its disposal; that is, the possibility of a relative slowdown of the tempo of growth of that part of the surplus value which goes to consumption by the capitalist class. The result, in this case, would be a corresponding increase of the fund of productive accumulation: more than 50% of the surplus value would go into accumulation, less than 50% into consumption. This reserve does exist. But if one takes into account the fact that the system's unproductive consumption also inevitably grows when production increases, then it will be clear that this reserve will in any event be less than 750s–500s, or less than 250s.

It is another matter if completion of the order does not necessarily involve creation of new capital in the shortest possible time: the order can then be fulfilled partly at the expense of new surplus value and partly at the expense of temporarily unreconstructed old fixed capital. With such a combined approach the goal can be reached more quickly, although the time needed to repair the losses to the old fixed capital is also extended, a factor that must inevitably prolong the whole period of industrial expansion in the capitalist system. In fact, that is precisely what does occur in real capitalism, with the consequence that *it becomes exceptionally important, for purposes of understanding the capitalist cycle in general, to undertake a separate analysis of the reproduction of the fixed components of constant capital on the one hand, the circulating components on the other.*

Under the most favorable conditions in the first year, therefore, only one-half of the order for new fixed capital will be fulfilled. At the end of the year the entire fixed capital in Department I will be equal in our example to 10,750; and part of the new sum of 750 will perhaps consist of the framework of factories yet to be completed, partially finished railroad construction, and so forth. The task of increasing fixed capital by 1,500 can only be completed at the end of the second year of industrial expansion, provided Department I maintains the same production apparatus and Department II does not use its accumulation fund (equal to one-half of 562.5) to increase its production apparatus; such an expansion would imply growth of cII beyond 2,250 and would be impossible with a deficit of means of production in Department I. Instead, Department II must use part of this surplus value, having the natural form of means of consumption, to replace exhausted inventories (if we are speaking of products which can be stored), and the other part must be transferred to Department I in order to increase

variable capital there, including an increase of variable capital for the new factories being constructed. In the event that a portion of capital is transferred from Department II into I, the proportions in Department I must also change, by comparison with our initial assumptions, in the sense of allowing for a somewhat accelerated construction of elements of new fixed capital, particularly the new fixed capital of enterprises manufacturing fixed capital.[22]

We shall not provide numerical illustrations here of the different possible variants of this process, nor shall we continue our example for the ensuing years of the industrial expansion. Henceforth we can make do with a briefer exposition of the most essential aspects of the matter.

Let us now suppose that in the third year of economic expansion Department I's growth is mainly due to the following: the construction of new enterprises for the manufacture of fixed capital (construction periods in the past were much longer than they are today); the growth of enterprises manufacturing the circulating component of constant capital; the replacement of depleted reserves of circulating capital in natural form; and finally, such increases of fixed capital as cannot be postponed, even though the price is high. This latter form of increase will be necessary to the extent that the strained reserves of old fixed capital cannot resolve the problem of expanded reproduction on such a large scale.

Department II expands its production apparatus in proportion to the increase of variable capital and the consumed portion of surplus value in Department I. The expansion of fixed capital occurs despite the rising prices, but only to the extent required by economic and technical considerations.

If we assume that during the third and fourth year of expansion the production apparatus will grow to the full extent of new accumulation in both departments, with an unchanging organic composition of capital, then by rounding off we get approximately the following scheme of reproduction at the end of the fourth year of expansion:

I. 7,200c + 1,800v + 900s (accumulation fund) + 900s (consumption fund)
II. 2,700c + 675v + 675s

This would be the scheme had there not occurred the growth of fixed capital just mentioned. Taking this growth into account, we must

assume a smaller increase of small "c," or of constant capital being replaced in accordance with the annual turnover: that is the case because in setting aside a portion of the current accumulation in new fixed capital we naturally reduce the possibility of a large increase on the part of the circulating portion of constant capital, which makes up a large part of the c being reproduced each year. With these considerations in mind, it would be more accurate to think of the production apparatus growing in smaller proportions, with the system's fixed capital growing more quickly. Let us assume that the figures in the schemes will be the following:

I. 6,400c + 1,600v + 800s (accumulation fund)
+ 800s (consumption fund)

II. 2,400c + 600v + 600s

At the end of the fourth year of expansion the following situation will prevail. The task of fulfilling the order for new fixed capital in the amount of 1,500 is completed. Fixed capital has also expanded to a certain extent under the pressure of causes just mentioned. In general terms it has grown, let us say, to 16,000 in place of the previous 13,750 (variations being possible here because we did not establish a figure for the growth of reserves of circulating capital). The new enterprises to manufacture fixed capital are completed and functioning, the reserves of the circulating component of constant capital are reestablished, and the same is also true of reserves of means of consumption in Department II.

The question might well be asked: why does the capitalist system require such an inflated production apparatus? Variable capital has risen from 1,000 to 1,600 in Department I, from 375 to 600 in II. The whole production apparatus has spontaneously grown to such dimensions in the comparatively brief interval of two years, under the influence of a concentrated order for new fixed capital in the amount of 1,500. *It has done so as if the order would be repeated every two years.* If such does not occur, then the accumulation fund of 800 in Department I will prove to be excessive and the system's production apparatus will begin to contract just as spontaneously as it expanded under the influence of a large order for fixed capital.

Thus we see before us, with striking precision, the different impact

upon the production process of a capitalist, as opposed to a socialist system of production. If a socialist system were to replace the capitalist one, at the peak of the expansion and just prior to the crisis, no such crisis situation could possibly develop. The 800s that are "redundant" for the capitalist system, have the natural form of means of production and would be put to use in the socialist system: socialism works directly for consumption and would avail itself of the expanded cI and cII, arising from objective economic causes, to raise both the population's norm of individual consumption and the general tempo of economic development. Partial difficulties could only arise from the distribution of the separate elements of the new means of production; that is to say, fewer machines of one type might be needed, more of another, more oil, less coal, and so on. For a capitalist system, in contrast, these 800s means of production become the source of a cruel general economic crisis: they are proof that the production apparatus of capitalism has surpassed the limits of market demand; and the spontaneous action of the crisis will mercilessly trim this apparatus down, once its development is temporarily halted by the structural limits of the capitalist system.

Essentially speaking, if one takes the material dimensions of overproduction as they are shown in our example, the difficulty does not appear to be great. With a total annual production of 9,600 in Department I for the year in question, overproduction comes to less than 10%. It is even less than 10% of the total gross product of society, amounting to 13,200, although it will naturally be felt much more acutely in the market for elements of fixed capital. How far might the system's production apparatus continue to contract?

This is a complex question of enormous theoretical and practical interest. If we look only at the material side, the apparent limit to contraction of the apparatus can be established as follows. In the fifth year of the cycle (and the first year of the crisis) production in Department I must contract far enough to reduce the overall production of means of production by 800 and to establish a corresponding regrouping in Department II. Furthermore—in this same fifth year of the cycle and first year of crisis—an unrealized balance of 800 means of production will be carried over from the fourth year of expansion, with the consequence that a further conjunctural contraction is needed in Department I in order to absorb these 800. For these reasons alone, therefore, the fall of gross production in Department I must reach

1,600. But the fall of production in Department I must also reduce Department II's demand for means of production: at a minimum Department II must contract in proportion to the contraction of v + s/2 in Department I.

The resulting contraction of working capital and gross production, during the first year of the crisis, will appear as follows*:

I. 5,332c + 1,333v + 665.5s (accumulation fund)
+ 665.5s (consumption fund) = 8,000
II. 1,998.5c + 500v + 500s = 2,998.5

The capitalist system in general is one of spontaneous regularities, including the spontaneous laws of the reproduction process: it cannot regulate itself according to rational, planned calculations. It enters spontaneously into a phase of industrial expansion, and it cannot overcome the crisis in a rational, planned manner. The fact is that curtailment of the production apparatus cannot remain within the limits we have sketched, and that is true for reasons going beyond the panic which arises so naturally in such circumstances. When Department II's exchange with Department I falls to 1,998.5—in place of 2,400 during the final year of economic expansion—Department II will now have an unrealized balance of more than 400 means of consumption. In reality it is true that the entire cycle is not divided into years, and the contraction might not begin at once in Departments I and II. But we must make the rough simplifications required of any theoretical exposition, so long as they do not distort the essence of the processes under study. In the present context we make the same simplification as Marx did and look upon the production process as being divided into yearly time intervals. It is for this reason that Department II suddenly turns out to have such an enormous volume of unrealized, surplus means of consumption (leaving aside normal reserves)—a surplus which would not arise in reality if this department began to adjust to the altered conjuncture at the first sign of the crisis. This reasoning applies all the more forcefully if one takes into account the fact that many articles of consumption cannot be stored over long periods: in the present case, for instance, the economy could not accumulate almost two month's supply of milk, baked bread, or cooked sausage. Nevertheless, if not to the extent given by the figures in our example then to some lesser extent, the unrealized balance which we have indicated must form in Department II, and must do so precisely because of the sudden change

of the economic conjuncture. Just as in Department I, the leading sector of the economy, there emerged a surplus of 800 means of production, and the old production apparatus, having expanded in the period of expansion, could not be preserved; so in Department II, because of its dependence upon Department I, a surplus must come to light and cause a further contraction of the production apparatus of the entire system.

Thus the scheme for contraction of the production apparatus goes beyond what we have given above. For a time the contraction continues, with the initiative now coming from Department II. This supplementary contraction of the production apparatus, leading to elimination of the unrealized balance of means of consumption, represents the final step in the process of curtailing production. The result is that the overall annual production will be significantly less than in the epoch of expansion, although it will remain somewhat greater than in the original year of the cycle.

As for the division of the whole cycle into yearly intervals of time, greater precision in this respect would bring the numerical proportions closer to the real ones without changing the principles applying to the process as a whole. On the other hand, insofar as the present case deals with the cycle in the epoch of free competition, we must consider the possibility of alleviating the crisis by way of opening new markets. This circumstance can and must be ignored, only if the condition is set out in advance that the study will deal with the relations of capitalism, taken as a single entity, with the implication that foreign trade can be left out because it would add nothing new to the general conclusions. Insofar as we are dealing with the conditions of *concrete* capitalism during the epoch of free competition, assuming both its division into national economic units and the simultaneous existence of small-scale commodity production, we cannot ignore the influence of foreign trade upon the character of the capitalist cycle in this period.

Increased opportunities to sell abroad must have the effect of promoting absorption of the unrealized balances—800 means of production in Department I and more than 400 means of consumption in II—and of doing so without a crisis. The sale of even a part of these balances, even of only 25%, has enormous significance for the entire system. That is true not because of the absolute weight of the market, which is generally insignificant (2.7% of gross production), but because sales in the foreign market will make it possible, at a given moment, to halt the contraction of the production apparatus of both departments at a level higher than would be the case if this reserve of

capitalist flexibility were not brought into play. Contrary to Rosa Luxemburg's thinking, the external market is not important in and of itself, but only because it permits avoidance of a far greater contraction of that market which capitalism acquires internally. This internal market is incomparably more significant for capitalism, especially when the issue is to preserve, beyond the period of expansion, the growth which has occurred in both departments in response to a major order for fixed capital.

Such an order pulls the system to a higher level of expanded reproduction. Once the order is fulfilled, contraction of the production apparatus, in general terms, is inevitable. However, the contraction will be smaller if there are circumstances to mitigate the conditions of crisis, thereby affording capitalism a better prospect of preserving its own additional domestic market, created during the period of expansion. It is precisely here that one finds the principal economic sense of the struggle, during periods of crisis, for external markets whose absolute dimensions are completely insignificant and whose importance will decline still further during the next period of expansion. What we have in mind, of course, is the struggle for colonies only in response to the problem of realization; we are not discussing the struggle for spheres of capital investment, for sources of materials, for naval bases, etc.

A second resource, considerably more important for increasing the elasticity of the capitalist system in a period of crisis (and also in the event of partial overproduction and depression in individual branches), is the reduction of prices. Thus far we have analyzed the entire process of reproduction in value terms, abstracting from the conjunctural rise and decline of prices. Now we must take this circumstance into account as well, for it is particularly important during the epoch of classical capitalism.

When the expansion began in Department I, as a response to large orders for fixed capital, it must have involved first of all a price increase for means of production, and an even greater price increase for elements of fixed capital. The higher prices for its production meant that Department I, from the viewpoint of redistributing social capital, found itself in a more advantageous position: it sold its production to Department II at a higher price while purchasing means of consumption at the old price. Moreover, the favorable conjuncture in Department I also promoted an inflow of capital by other routes, for the rate of profit had risen here. When Department II is drawn into the expansion, prices also rise for articles of consumption. If this rise of the overall

commodity price index takes place proportionally, it brings all branches of production back into the same relationship with each other, the single exception being the gold industry. In this case the price increase will be based upon two fundamental facts. First, the value of commodities increases due to the increase of socially necessary labor time,[23] which raises the average value of production. The increase of socially necessary labor time results from bringing backward enterprises into operation, from using less skilled additions of labor power, and from expanding agricultural acreage into less fertile land. The second cause of the price increase is the conjunctural prevalence of demand over supply. Once this price increase becomes universal, it signifies nothing more than a fall in the purchasing power of gold. In this event the worst possible conjuncture develops for the gold industry: the prices for all of its elements of production have risen,* including wages and the price for elements of fixed and circulating capital, while its own production is "priced" the same as before; in other words, a pound of gold is still minted into the same number of gold marks, dollars, pounds sterling, etc.

When the crisis breaks out it normally begins in Department I, and prices for means of production are the first to begin declining. Department II derives a temporary advantage, just as Department I did earlier: for the same number of units of money capital it now acquires a greater volume of means of production in natural form. However, the crisis condition spreads very quickly into Department II, which is then obliged to sell its own production at reduced, crisis prices. The result is to equalize relations between all branches on the basis of similar price reductions. The single exception, once again, is the gold industry, which at the very peak of the crisis for the economy as a whole enters into its own period of prosperity. If prices fall, shall we say, to 15% below average, this industry has the opportunity to renew its fixed capital and replenish elements of circulating capital in exceptionally favorable circumstances. A pound of extracted gold can still be minted into the same amount of money as before, or exchanged for the same quantity of banknotes from the central banks of issue, and this branch never experiences a crisis in selling its production.

It is true that the decline of wholesale prices for means of consumption, being carried over to retail prices in conditions of free competition, is accompanied by a reduction of variable capital in both departments as well as a reduced consumption fund for the class of capitalists. Despite their fall in terms of value, however, the consumption funds are able to purchase relatively more means of consumption in natural form.

Indeed, at such moments the decline of wages normally lags somewhat behind the decline of the cost of living. All of these developments, taken together, represent a very significant factor for alleviating the existing disproportions and absorbing the unrealized commodity inventories.

Let us suppose that the entire original process of contraction on the part of the production apparatus, as we discussed it earlier, occurs in the fifth year of the cycle or the first year of crisis. The supplementary contraction is completed in the second year, and the whole system reestablishes the conditions of proportionality at a lower level of reproduction. The decline of production has reached its lowest point. What factors will now promote a spontaneous emergence from the crisis?

Several of these factors have already been discussed. They include the following: 1) absorption of commodity surpluses by way of lower prices; 2) expansion of external markets; 3) entry of the gold industry into the market in order to renew and expand fixed capital (along with a further increase of this industry's demand due to the growth of gold production, a development stimulated by the conjuncture as a whole); 4) a certain improvement in Department II in cases where the contraction went beyond what was necessitated by the reduced level of social consumption; and 5) the most important factor of all, namely, renewal of fixed capital by the strongest and most viable enterprises, especially in Department II. Having survived the most acute moment of the crisis, and possessing unspent amortization funds, these enterprises avail themselves of the most favorable of all possible conjunctures to purchase fixed capital at reduced prices.

The point is that these enterprises were unable to undertake the necessary renewal and expansion of their fixed capital during the period of expansion because of the strained demand for elements of fixed capital coming from other buyers, the unacceptably high prices, and the need to mobilize capital for the purpose of increasing variable capital. On the other hand, in conditions of intensive competition,[24] the decline of prices for articles of consumption enforces an adjustment to the new state of affairs by way of a maximum reduction of production costs.

Thus we see that enterprises in Department II renew and expand their fixed capital, applying all the new technological advances, at a different moment of the cycle when compared to the branches manufacturing elements of fixed capital. The latter branches renewed their fixed capital and built new enterprises towards the end of the industrial expansion, whereas the light industrial enterprises (at least the strongest among them) do so toward the end of the crisis, following the gold

industry. This circumstance is very important for understanding the character of the economic cycle in the epoch of free competition, and we shall return to it later in a different context.

If this process of renovating fixed capital begins in the second year of the crisis—the expansion of fixed capital will also be needed due to growth of the organic composition of capital—the result will be to cause a decisive about-turn of the conjuncture. Renewal and expansion of a part of the system's fixed capital is a sufficiently strong stimulus to cause the entire economy to pass from a condition of general crisis to one of depression, representing the first step along a new rising curve of the economic conjuncture and the first phase of a new industrial cycle. The about-turn then spreads to other branches of the economy, and the expansion and renewal of fixed capital begins in the remaining branches of production. The only exceptions, for the time being, are the enterprises manufacturing fixed capital, insofar as they renewed and expanded their own fixed capital comparatively recently. If the expansion is strong enough, however, the transition to new construction will also occur in these branches, and the whole capitalist system will once again enter into an epoch of general expansion.

From what we have said it will be clear why the analysis of an industrial expansion begins with a large order for fixed capital. It is not at all necessary for such an order to originate either abroad or in a noncapitalist environment. Appeals in that direction are frequently nothing more than a way of hiding a lack of familiarity with the dynamic of a typical capitalist cycle and do nothing but confuse the question. A concentration of large orders for fixed capital in a comparatively short period of time, lasting only 2-3 years in a cycle of 8–10 years, results from the very nature of the capitalist cycle and represents the inner law of its dynamic. This dynamic, in turn, is determined both by the structure of capitalist production and by the entire social structure of capitalist society, wherein private production prevails in the market, being motivated by the pursuit of surplus value, while the distribution of surplus value is achieved through struggle.

In the majority of cases it is during this very period that society realizes all of the technical progress occurring in the course of the cycle, which normally extends over a decade.

Instead of disclosing the process whereby a typical economic crisis of capitalism imminently arises from the system's general structure, many contributors to our economic literature all too often get away with simply repeating the general Marxist view that capitalist crises are explained by the contradiction between the social character of

production and the private character of appropriation. But the whole task consists precisely of disclosing the concrete economic content of this formula, and of doing so not only with respect to the cycle under classical capitalism, but also with respect to imperialism. This work represents my own variant of how to interpret such a theme. The only criticism that I would consider worthy of serious attention is one offering some kind of alternative to the interpretation I have provided.

From what we have said it will also be clear that only one profound economic crisis is needed, whatever its causes, in order that all ensuing crises should be periodically repeated. The main, direct, and immediate cause of general economic crises in bourgeois society is the unevenness of reconstructing, and even more so, of expanding fixed capital. And this same unevenness, as we have seen, is by no means accidental. Quite the contrary is true. Although Marx himself expressed the thought without sufficiently developing it, it is only by beginning with his view of the unevenness over time of reconstructing fixed capital, as the cause of the periodicity of crises, that we are able both to explain this periodicity in more detail and really demonstrate why crises under capitalism are both possible and inevitable. In our scheme we have clearly distinguished the process whereby precisely such a general crisis matures.

In addition, we have shown that such crises are only inevitable because of the capitalist structure of social production, as spontaneous production for the market, wherein an enormous expansion of the production apparatus runs into the narrow basis of social consumption. At that point the entire system spontaneously endeavors to reconstruct the disrupted conditions of proportionality, not by way of expanding social consumption, but by a chaotic flight backwards in order to salvage individual capitals. The system possesses no direct stimuli toward production for the sake of expanding consumption. Because the only direct stimulus is to produce for the sake of increasing the profit of each individual capitalist, capitalism restores equilibrium by trimming down the production apparatus, thereby bringing about an inevitable and significant curtailment of social consumption. The production apparatus, having developed in the period of intensive construction of new fixed capital, is now curtailed; and the same process causes a reduction of social consumption, which under capitalism is not the direct goal of the production process, only a function of capitalist production. By expanding consumption it would be possible to stabilize the existing tempos of expanded reproduction when they become temporarily detached, in the years of economic expansion, from the nor-

mally inadequate (that is, structurally inadequate) limits of effective demand. But under capitalism the contradiction is not resolved in this manner; instead, both production and consumption are cut back, with the effect of impeding development of the productive forces and limiting the satisfaction of social needs.

From all that we have said, one thing should stand out with particular clarity; that is, the absurdity of all the theories of bourgeois economists and of Marx's critics concerning a contradiction between volumes II and III of *Capital* on the question of the causes of general capitalist crises. In this connection let us offer the following observations. These gentlemen look at the schemes of reproduction in Volume II of *Capital* and see that they assume the entire fixed capital is fully amortized over one year and is then smoothly replaced, along with the elements of the circulating component of capital. Then they draw the altogether desirable conclusion—desirable for them—that crises can only occur under capitalism when there is disproportional distribution of the social capital between different branches. The schemes, from this viewpoint, are said to demonstrate the impossibility of general crises. But the fact is that the schemes represent only the most general analysis of proportionality (and therefore also of disproportionality) in capitalist reproduction, and their main purpose is to show how expanded reproduction is possible in general terms. They demonstrate the general relations of proportionality. In order to show how general crises are possible under capitalism one must carry the investigation further, assuming in the first place that fixed capital is not amortized during a single year and, secondly, that its reconstruction and expansion takes place unevenly over time. Because Marx was aware of such unevenness and used it to explain the periodicity of crises, the need arises to construct a scheme both of reproduction and of the cycle, which assumes the laws of proportionality, as established by the schemes in Volume II of *Capital*, together with the uneven reconstruction and expansion of fixed capital. Undertaken from this standpoint, an analysis of the capitalist cycle will portray how a typical, general, periodic economic crisis matures—a crisis that cannot be eliminated from the capitlist system precisely because this system is unable to expand social consumption in correspondence with the growth of the productive forces. What this means is that there is no contradiction whatever between the second and third volumes of *Capital*. The contradiction is between the apologists for capitalism among the bourgeois economists and the critics of Marx, on the one hand, and a genuinely Marxist theory of capitalist reproduction and crises, on the other.[25]

Thus we have established that a spasmodic reconstruction and expansion of fixed capital is integrally connected with the very essence of the reproduction process under capitalism. Once the cyclical pattern is established, the expansion and renewal of fixed capital inevitably begins in the gold industry and in light industry when the crisis ends, and then spreads to other branches. This is a time of maximum price reductions for all commodities, including means of production. The result is that the process of renewing[26] and expanding fixed capital becomes concentrated primarily in certain specific years of the cycle as a whole, so that the entire process of expanded reproduction takes on a spasmodic character. The genius of Marx was revealed not only by the fact that he was able to discover the laws of proportionality in capitalist reproduction, but also by his no less significant achievement in grasping the whole importance for the capitlist cycle of unevenness in reconstructing fixed capital. In Marx's time, or more precisely, at the time when he formulated this position—the first draft was done in the years 1863–1867 and was then supplemented in the early 1870s—the production of fixed capital exerted considerably less influence upon the production process than during subsequent decades of capitalist development.

What we have said in the foregoing analysis does not imply, by any means, that crises and critical conditions in the capitalist system are limited to the causes indicated thus far. In circumstances where enterprises are privately controlled but production has a social character, the anarchy of production as a whole, together with the complexity of the relations of proportionality, inevitably creates the preconditions for crises arising from the above causes and from others as well. But these other disproportions usually have their effect within the context of a previously established cyclical movement of the process as a whole: they either reinforce or moderate the process of expansion or contraction of production.[27] Natural conditions also have an influence upon the reproduction process. For example, a harvest failure, affecting food and materials in agricultural production, can alleviate a disproportion if a general crisis of overproduction is already in existence, whereas a good harvest, on the contrary, can only add to the volume of unrealized commodities. At a time when production is growing and many elements of production are in short supply, the results of a good or bad harvest will, of course, be the exact opposite.

The same could also be said of the unevenness of capitalism's development on a global scale, especially with reference to the uneven way in which backward countries place orders with the industrial countries for purposes of constructing railroads, new enterprises, and the like.

PART FOUR

7. A Scheme of the Economic Cycle under Monopolism

Having portrayed the growth of an economic expansion and preparation of a general crisis under free competition, it will now be much easier to investigate the change of the cycle under monopolism.

From a methodological viewpoint it is necessary to differentiate between the generic features, so to speak, of both the capitalist structure and the process of capitalist reproduction on the one hand, and the specific and particular features created, on the other hand, by the capitalist system's monopolistic degeneration.

What is constant, and what changes?

Control of social production by private individuals or private groups remains unchanged, as does the private character of appropriation. The anarchy of production continues, and the law of value remains the spontaneous regulator of economic life, although the interweaving of free competition with monopoly causes the action of this law to be impaired and distorted. Monopolism corrupts the mechanism of regulation through value, but is obviously unable to achieve planned control of the production process. Departing from the conditions of free competition, without yet arriving at organized, planned leadership, the system of regulation is one that increases economic disorganization within capitalist society as a whole and intensifies the thrombosis in development of the productive forces.

The fundamental contradiction of the capitalist system also remains, as production for the market for the purpose of acquiring profit, with the consequence that the limit to development of production continues to be the volume of effective demand. But the conditions for expanding the capacity of the market have altered, and the barriers in the way of

such expansion have multiplied. The pursuit of profit does not change, but new construction becomes extremely difficult in the presence of monopolistic tendencies, including the extraordinary consolidation of enterprises and the enormous concentration of capital. The formerly anarchic-partisan pattern of establishing new enterprises, oriented upon future demand and occurring under the pressure of fierce competition, no longer represents such a powerful incentive to acquire profit by means of bringing more and more new means of production together with the necessary labor power. The economic development of capitalist society slows down, and the curve of expansion moves increasingly toward the horizontal plane of simple reproduction. Corresponding changes occur in the conditions of proportionality throughout the entire system, including an inevitable increase of the unproductive consumption of capitalist society at the expense of accumulation.

As during the epoch of free competition, the capitalist class endeavors in every way possible to reduce the wage fund, the difference now being that the balance of forces changes to the disadvantage of the working class. In exceptional instances the average wage rises; more frequently it remains stable; and in recent years, especially with the intensification of capitalism's general crisis, it begins to decline everywhere. Development is therefore blocked by the fact that effective demand, created by variable capital, ceases to grow.

The capitalist system requires reserves of fixed capital and transitional supplies of both means of consumption and elements of the circulating portion of constant capital, for otherwise a rapid cyclical development is impossible. Under imperialism, however, this effort to increase reserves of fixed capital reaches monstrous dimensions. The attempt to annihilate all competition in branches embraced by monopolistic associations, and to satisfy the entire social demand even in periods of recovery and expansion, leads to an enormous accumulation of redundant fixed capital and its subsequent complete immobilization, at the same time as an ever-growing portion of society's labor power is likewise immobilized. On the one hand this immobilization is the consequence of a general thrombosis in the whole process of economic development; on the other hand it becomes the most powerful brake on the development of cyclical expansions and the progress of technology.

Under free competition the pursuit of profit, common to all forms of capitalism, frequently results in the need to reduce prices by lowering production costs. This can be accomplished by expanding production and improving the equipment. Under monopolism, in contrast, the

same goal is more frequently reached by maintaining the previous prices, curtailing supply, and if necessary, curtailing production.

As a result of all these factors, some of which are causes of the slowdown of society's economic development, while others are its consequences, the character of the economic cycle and crises changes under monopolism.

Let us now try to clarify the unique features of the cycle under monopolism, keeping the numerical illustrations to a minimum and avoiding a number of related details. In the course of our analysis we must keep in mind the fact that we are dealing with the world economy and with a very uneven development of capitalism in individual countries.

The question is: what magnitudes would have to be changed in our example if we were to design it in conformity with the economics of imperialism?

The necessary changes would be the following:

1. We must adopt a higher organic composition of capital, let us say a ratio of c to v in the order of 5:1 rather than the previous 4:1.

2. We must adopt a much higher value, in absolute terms, for the whole fixed capital, and also raise the ratio of the value of fixed capital to the gross product of society. Now we shall provisionally take the value of fixed capital to be 20,000.

3. We must have much larger reserves of fixed capital, say 7,000.*

4. In the total sum of the annually reproduced constant capital the cost of wear on the part of fixed capital must increase relative to the value of circulating capital.

5. The reserves of circulating capital must increase by comparison with the epoch of free competition.

6. As a result of the increase of labor productivity and the rise of the organic composition of capital, variable capital must grow more slowly during the period of expansion than gross production, measured not only in value but also in natural terms.

7. Unproductive consumption must grow at the expense of accumulation. In our example, however, we shall retain the share previously going into accumulation in order to demonstrate more clearly that the changes taking place in the cycle depend on the other factors, and not upon this one, which is itself derivative in character.

There are two possible causes of an industrial expansion—unevenness over time in the reconstruction and expansion of fixed capital, and unevenness in the general tempos of capitalism's development, or

development of one part of the capitalist entity at the expense of another. Of these two causes, we shall begin by looking at the first on the grounds that it does not require construction of two different schemes: one for the sector of capitalism developing more rapidly, and another for countries whose development has come to a halt or which find themselves in a condition of economic regression.

Now let us suppose that in this case too the starting point of the expansion is an order for new fixed capital in the amount of 1,500. How will the industrial expansion develop?

Completion of such an order is obviously easier for the system of imperialism because it is apportioned over a much more powerful apparatus. Within this apparatus the relative weight of enterprises manufacturing fixed capital is greater, there are greater reserves of fixed capital in the working enterprises, and there are also greater reserves of circulating capital in natural form. In these circumstances fulfillment of the order does not require widespread construction of enterprises for the manufacture of fixed capital, nor does any such stimulus exist in the form of competition between uncoordinated, individual enterprises, struggling for a market.

At this point the question arises as to whether it is proper, in our example, to take the same absolute figure to represent the orders for fixed capital. Will this approach not mean that changes will occur in the cycle because of the relative decline of this figure for orders, when compared to the system's greater production apparatus—and not because of structural changes in the capitalist economy?

Our use of the same absolute sum of orders for fixed capital is deliberate. We take this approach because our purpose is to establish what happens when the relative magnitude of spasmodically growing fixed capital declines in relation to the magnitude of existing fixed capital, and does so because of a slowdown of the tempo of social development. Moreover, we are also interested in how conditions change for the creation of fixed capital over time. Indeed, it will subsequently become clear that we might even more appropriately begin by assigning a smaller magnitude to this one-time order for fixed capital.

Let us now consider why the system can deal more easily with such an order and why it does not require nearly so significant an expansion of the production apparatus.

Let us use the following numerical scheme for our example:

Department I

Functioning fixed capital 20,000, in reserve 35%:
6,000c (2,000 fixed + 4,000 circulating) + 1,200v + 1,200s

Department II

Functioning fixed capital 6,000, in reserve 35%:
1,800c (600 fixed + 1,200 circulating) + 360v + 360s

It will already be apparent from the scheme why we begin with a new order for fixed capital of the same magnitude as in our previous example, which referred to the epoch of free competition. Given enormous reserves of fixed capital (one of the characteristic features of monopolism), and with the existence of monopolistic trusts in the main branches of production, above all in heavy industry, there is no economic necessity for rapid creation of a great new volume of fixed capital, especially when the majority of such orders now occur at a different point in time.

From the viewpoint of creating new values, or creating *new* fixed capital for society, imperialism draws upon the same sources; namely, the accumulation fund of Department I plus that portion of accumulation in Department II which can be converted into fixed capital through exchange. Department II must exchange a corresponding volume of means of consumption for the elements of fixed capital, which are only created in natural form by Department I, and then only by certain of its branches.

As for fulfillment of the order, the opportunities to begin with a "loan" from the system's old fixed capital are now much more significant. In this respect it will be assumed that this "loan" permits more rapid completion of the order in terms of manufacturing the necessary elements of fixed capital in their natural and material form, while the creation of *new* values is extended over time and thereby lengthens the phase of industrial expansion. The second part of the expansion will be devoted to replacing the losses of fixed capital, caused by its initially strenuous use. The alteration of these time periods represents one of the most essential changes to occur in the economic cycle of monopolistic capitalism.

Turning to our example, we can imagine the order being satisfied in the following manner and taking a single year.

Suppose the production apparatus in Department I expands this way. Variable capital increases by 25%, or from 1,200 to 1,500. From the accumulation fund created in the initial year of production, 300 go to increase variable capital in Department I and 300 are added to constant capital. Constant capital (with the same organic composition of capital) increases from 6,000c to 7,500. Of these additional 1,500c, 300 are covered out of surplus value; 500 come from the increased amortization of fixed capital, which is being used more intensively in Department I; and 700 are drawn from reserves of the circulating portion of constant capital. At any rate the addition to working capital of 700 from reserves of the circulating portion of constant capital, assuming adequate reserves of fixed capital, is a problem which can now be resolved much more easily than in the epoch of free competition. This sum represents slightly more than 8% of the annual production of Department I in the initial year (i.e., 8,400). Given the capacity of monopolism's production apparatus, mobilization of such reserves can be managed without any new construction—all the more so since new construction becomes extremely difficult with the limitations imposed upon both free competition and the establishment of new enterprises. In the epoch of free competition, by way of comparison, we saw that new construction begins as early as the first year, or at the latest, in the second year of an industrial recovery.

With the tempo of expansion implied by the figures we have adopted, and assuming Department II expands in proportion to I, we shall have the following results for the first year of the economic expansion:

Department I

7,500c (2,500 fixed + 5,000 circulating) + 1,500v
  + 750 accumulation fund + 750 capitalist consumption fund

Department II

2,250c (750 fixed + 1,500 circulating) + 450v + 450s

10,500 means of production will be created, as opposed to 8,400 in the initial year preceding the industrial expansion, i.e., 2,100 more. If 200 of the 300 added to variable capital in Department I go to enlarging the enterprises manufacturing fixed capital, then with a ratio c:v of 5:1, this sum will yield 1,000 elements of additional fixed capital that can be

created within Department I as a result of developing these same branches. The missing 500 can be covered either by a loan from the fixed capital of Department I or else by a loan from the fixed capital of Department II. In the latter case Department II will sell means of consumption to I in the required amount of 2,250 during the year, but will buy fixed-capital replacements in the amount of 250 rather than 750, setting aside 500 in the form of money capital. Or, as a final alternative, the missing 500 can be covered by a "loan" from the fixed capital of both departments, in various proportions. Such a "loan" will signify conversion of a corresponding sum of amortization deductions into money capital, with the result that reconstruction of this sum of fixed capital in natural form will be carried over into the following economic year.

In reality such operations are constantly taking place. Marx called this process the emancipation of capital. In the present case it is a matter of emancipating a portion of the fixed capital, which adopts the form of money capital and then returns to the natural form of fixed capital when the amortization funds are used for orders of new fixed capital. The general possibility of maneuvering with the amortization funds of fixed capital is a very important resource in the system of capitalist reproduction and increases its elasticity in periods of cyclical expansion.

Regardless of how this "loan" from fixed capital might be apportioned between the two departments, it is clear that the expansion must continue during a second year. However, the base for this expansion will no longer be completion of the order with which the recovery began, for that order is already satisfied in material terms. Instead, the expansion will now be based upon the need to cover the "loan" of 750 from the system's fixed capital; that is to say, it will now be necessary to recreate the old values which have been expended rather than produce new values to this amount.* In this case, if the level of production in Departments I and II remains exactly the same as in the first year of the expansion, the accumulation fund of Department I will go to replacing the loss of fixed capital wherever it occurred.

Replacement of this loss can be accomplished by the accumulation of Department I on its own, although such need not be the case. In spite of the different natural form of its production, Department II might also participate. I have already indicated above that there are no insurmountable obstacles to a transfer of value from Department II into Department I, and it is only by taking a very crude and apprentice-like

attitude toward the letter of the Marxist schemes in Volume II of *Capital* that one could see impassable barriers here. In practice this question is decided differently in accordance with different circumstances. But even if Department II did not participate either in the "loan" from old fixed capital or in its repayment, it remains true that the entire process of creating new fixed capital, not only in its natural form (which is obvious) but also in the form of creating new values, would lie exclusively with Department I, and the crisis must begin sooner in II—assuming the extent of the production increase in I remained unchanged.

But no matter what course is followed, the production process enters into a new phase when the order is completed and the loss of old fixed capital is replaced. In the epoch of free competition this new phase is a general crisis, because all possibilities of expanding the production apparatus in response to a growth of the market are exhausted. Then it is only a matter of the resources available to moderate the crisis, for example, the opening of new markets in other countries.

In the epoch of imperialism, on the contrary, the cycle of expansion is still not completed: both the enterprises manufacturing fixed capital as well as the enterprises in other branches, which have yet to increase their own fixed capital, still have a stimulus to increase precisely this part of their production apparatus. If we assume for purposes of simplification that the order for new fixed capital was fulfilled not only by the resources of Department I, but also by those of Department II, then the fixed capital of Department I will now be equal to 21,000 in place of the former 20,000; in other words, it is still far from increasing in proportion to the increase either of variable capital or the circulating portion of constant capital. Maintaining the former proportions, it would have to grow to 25,000. And we have yet to consider the fact that the same stimulus to expand fixed capital also exists in Department II. It is this increase of fixed capital which represents *the final reserve of an industrial expansion under imperialism.* There is no obligation for the increase to occur in the proportions we have indicated, for there is no economic necessity at work here. In one measure or another, however, this increase can and will take place.

It is clear, therefore, that the crisis can only fully develop after this final resource for industrial expansion is exhausted. This variant does not exclude, by any means, the possibility that the crisis will be preceded by a brief depression, whose origins might be the following. If a condition of crisis arises first of all in Department II, once the first

impulse for expansion has been exhausted, its chief result will be to cause a crisis situation only in those branches manufacturing means of production for II (primarily in branches providing material such as cotton, leather, etc.), and not throughout Department I as a whole. But if Department I enters into the second phase of expansion and begins to increase the system's fixed capital, the result will be to smother the depression temporarily. In this case the condition of crisis will be overcome in Department II either by increasing I's demand for means of consumption, or alternatively, by transferring into Department I a part of II's unused accumulation fund. The effect of such a transfer will be to emancipate part of the variable capital in Department I, having the natural form of means of production and including elements of fixed capital.

If we suppose that this second stage of expansion lasts two years, during which the entire surplus of both departments is mobilized for increasing the system's fixed capital; and if we further suppose that the turning point of this development is a supplementary expansion of fixed capital by 1,750, then the crisis will break out at the end of the fourth year of the expansion. It will erupt because in the fifth year of the cycle 750s in Department I, having the natural form of means of production, will not be utilized either in Department I or in Department II. Department I will automatically begin to contract its output, with the consequence that not only will there be no use for 225 means of consumption, constituting the accumulation fund of Department II, but there will also be no market for a part of the 2,250cII which made up Department II's exchange fund with Department I throughout the entire period of expansion.

We see, therefore, that the unique character of a crisis under monopolism, as compared to the epoch of free competition, is found first of all in *the transfer of reconstruction and expansion of fixed capital to a different moment of the cycle, a phenomenon connected with occupation of the basic branches of production by monopolies and the enormous reserves of fixed capital in existence at the beginning of the period of economic expansion.*

A second unique feature of the crisis is found in the fact that it can begin very suddenly, at a time when the existing dimensions of the enlarged production apparatus appear to represent a stable accomplishment of the whole system—or a result of organic growth on the part of the internal market—rather than a consequence of temporary cyclical expansion. In any other circumstances it would make no sense

generally speaking, to increase the system's fixed capital in the second phase of the expansion, and the increase would not in fact occur because the necessary stimulus would be lacking.

A third unique feature of the cycle is the fact that the increase of fixed capital, during the second phase of the expansion, occurs at a time when the system is coping with the increased demand without experiencing any of the strain characteristic of the epoch of free competition. The entire process can take place without a dramatic price rise for elements of fixed capital, with the consequence that the crisis itself appears all the more sudden and inexplicable in terms of the previous conjuncture.

Finally, a fourth unique feature of the cycle can emerge in the form of a brief depression, occurring between the first and second phase of the expansion. Caused by the redistribution of productive forces that is under way at this point, such a depression will be overcome quickly and its economic significance will remain just as incomprehensible to economic observers as the causes of the subsequent expansion and crisis.

In the alternative case, where the original cause of the expansion is a sudden increase of foreign trade rather than a single large order for fixed capital, production will expand by the entire sum of new annual accumulation and the process will develop as follows. Should the expansion of foreign trade take place through exports of means of production, primarily elements of fixed capital, then the picture will resemble the one already analyzed in our first variant. The difference will be that the accumulation of fixed capital in natural form, during the first phase of the expansion, will occur outside of the system rather than within it, and this fact might enlarge the opportunities for expansion in the second stage. The reasons for this pattern will be clear from what we have already said. Should the export of consumer products and means of production grow proportionately, the existing resources of fixed capital will be utilized equally in both departments and expansion of the system's fixed capital, during the second stage, will likewise proceed equally in both departments. During the first phase both departments will grow, putting their accumulation to work and thereby creating the elements of a new, supplementary domestic market.

When development proceeds beyond the limits of the original impulse, which stimulated the expansion; when it exceeds the limits of the supplementary market created by this expansion; and when the maturing crisis has been delayed and suppressed by the expansion of fixed capital—in other words, when the last reserve promoting a high level of

activity has been exhausted—then the general crisis will begin. It will begin in Department I, where the enlarged production apparatus turns out to be redundant once the period of large orders comes to an end. Production will begin to contract, the number of employed workers and the wage fund will decline, and the result of such a contraction in Department I will be the beginning of the crisis in II.

This second variant of an economic expansion and crisis is possible in the event that one part of the capitalist system develops at the expense of another; that is to say, it is both possible and even inevitable on the basis of capitalism's law of uneven development (and uneven decay). In this case the entire process takes on the following basic features. One part of the capitalist whole, developing at the expense of another, will acquire the opportunity to expand up to the full extent of its accumulation. In the "successful" capitalist sector there will be a weakening of the structural thrombosis, which impedes development of the productive forces and is intensified under the system of monopolism. For a numerical illustration of this kind of development one could take the original year of our first example, dealing with the first variant of the cycle under monopolism, and make provision for proportional development of the two departments as in Marx's schemes of expanded reproduction (remembering that Marx's schemes describe the ideal picture of capitalist expanded reproduction, wherein one-half of all newly created surplus value goes into accumulation and the entire economic system develops smoothly and very rapidly). After 3–4 years of such smooth development the whole production apparatus will have expanded: in the first year by 500 in Department I and 150 in II; in the second year by 542 in Department I and 162.5 in II, etc.*

Having grown by roughly 20–25% over 3–4 years, the production apparatus will be similar to the results in our first variant of development, where the process was more abrupt and spasmodic. After exhausting the resources of the expansion—which resulted from the unevenness of capitalist development and growth of the internal market—the capitalist system will then take up the task of enlarging its fixed capital to an extent consistent with the general expansion of both production and the production apparatus. In this case too the crisis will erupt when the process of expanding fixed capital has been completed.

Looking at the matter formally and dogmatically, our example would indicate that the crisis must break out when fixed capital grows by 20–25%. But such limits for the expansion of fixed capital would be unusually high for capitalism and are obviously conditional rather than

obligatory, as are all the numerical examples employed here.

At this point the following questions arise.

1. Which of the two variants of expansion described above is closer to the essence of monopolism and historical reality?

2. What is the fundamental difference in the character of the cycle under monopolism when compared to the period of free competition?

3. What are the possible sources of recovery from the type of economic crisis that we have described under monopolism?

I consider the first variant of expansion to be possible under imperialism, but not typical in the same way as during the epoch of free competition. Under free competition the cycle began with a large order for fixed capital, followed by expansion and then a crisis. At that point a new period of renewing and expanding fixed capital began, the circle was closed, and the basic processes were obvious. Under imperialism the type of impulse created by large orders for fixed capital cannot be ruled out for one part of the capitalist system—if the order is concentrated on certain points and over certain intervals of time at the expense of another part of world capitalism. But this case is not typical: if one part of capitalism expands because of impaired development in another, the latter might be drawn into recovery to some extent by influences originating in the former. Furthermore, what is likely to be involved is an expanding market not merely for fixed capital, but also for other elements of production and for means of consumption. From this viewpoint the second variant would appear to be more typical.

The basic difference in the character of the cycle is found in the fact that under free competition new construction begins with the onset of expansion. Conditioned by less significant reserves of old fixed capital and by the whole situation during the epoch of free competition, construction activities are stimulated by forces we have already considered and are pressed to the limit. One cycle begins with large orders for fixed capital, concentrated over a comparatively short interval of time; and a new cycle begins with the process of renewing and expanding fixed capital when prices fall in conditions of crisis. Under monopolism, on the contrary, renewal and expansion of fixed capital occurs during the expansion itself, primarily in its second phase, and before the crisis begins. In this way the whole system loses that fundamental stimulus for rapid expansion which existed under free competition and was periodically recreated at a certain stage in the cycle's development. Because the processes of enlarging fixed capital are transferred to the end of the expansion, under monopolism the expan-

sion itself can be prolonged—but then the system loses an important lever for overcoming the crisis.

From what has been said it is clear that relocation of the processes of enlarging fixed capital to a different stage of the economic cycle leads to the two unique features of a crisis under imperialism, as we have described them. Later I shall look in detail at a third unique feature of a crisis under imperialism, showing that it might not, by contrast with the epoch of free competition, be accompanied by a credit crisis. This matter will be considered further in another context.

As for the conditions for overcoming crises and creating the prerequisites for a new expansion, we see that the character of the economic cycle under imperialism is to do the very opposite; that is, it creates the prerequisites for prolonging the crisis insofar as the system cannot overcome a crisis by those means and methods which were available in conditions of classical capitalism. The system enters into a crisis after the increase of fixed capital has already occurred. This burden of fixed capital now forestalls further advance. Contrary to free competition, the system of monopolism weakens the mainspring of development and strengthens the elements blocking the productive forces, thus creating conditions for prolonging the crisis. The crisis must liquidate the swollen production apparatus, which is connected with specific and transitory causes resulting from the economic expansion. A slow recovery can only begin when the dimensions of production have been correspondingly reduced. But recovery will be much slower than in the epoch of free competition because the elements blocking the productive forces now act with incomparably greater force. More and more the capitalist system will lean toward conditions of simple reproduction.

The situation could only change in the event of a world war and creation of conditions more favorable for one part of capitalism at the expense of another (but including a slower tempo of development for capitalism as a whole). Alternatively, the situation could change in the event of exceptionally important technological innovations of one kind or another, which would cause rapid moral wear of a significant portion of the old fixed capital and open a new market for the branches manufacturing fixed capital. All of these factors could help to overcome the crisis, but they would not alter any of the factors that lead to changes in the character of the economic cycle under monopolism, or that confront capitalism, more dramatically than ever before, with the problem of its growing impotence in the matter of surmounting a crisis condition. In the period of imperialism the capitalist economy resembles

more and more a machine in which any increase of motive power is increasingly offset by the growing forces of friction.

When spontaneous forces of the type described earlier are missing, the capitalist system, as we have already said, will have a tendency to return to the level of production existing before the expansion. More generally, it will turn toward the conditions of simple reproduction. The reconstruction of fixed capital will gravitate toward the dimensions of the average annual amortization, and it is precisely here that the contraction associated with the crisis and the downward movement of the curve of production will encounter its limit. Production of means of consumption will be reduced to the level existing prior to the expansion, to which will be added the demand caused by population growth for the most essential articles of consumption. But in this respect there is also a possibility of regression should there occur a general reduction of the wage level and should capitalism enter into an epoch of forcefully reducing the worker's consumption below the level established in the previous epoch. Production of elements of the circulating portion of constant capital will fluctuate within limits determined by the above conditions. On the whole this means that the system will enter into a long period of postcrisis depression—a depression having a character completely different from those in the epoch of free competition. In the epoch of classical capitalism a depression represented a specific moment in the cycle's development; more precisely, it represented that moment when contraction of the production apparatus, associated with the crisis, was generally over. Depression meant a renewal of demand for fixed capital on the part of enterprises that were adjusting to the reduced level of prices, with the consequence that movement began once more along a rising line, even if still only rather slowly. Unless it grows over into a world war, the depression that follows a crisis of monopolism has an entirely different character. On the one hand it will, if one might put it this way, liquidate the excessive contraction of the production apparatus occurring as a result of the crisis; on the other hand it will reflect an effort by the economically strongest capitalist countries to adjust their level of production to the new level of the world price index.

Whereas under free competition the strongest enterprises adjusted to low prices by improving their production technology, under monopolism the economically strongest countries carry out a certain degree of rationalization and revise their tariffs upward in order to deprive more backward countries of their share of world trade. In this case the postcrisis depression will bring a certain improvement of the

economic conjuncture in the strongest capitalist countries (as compared to the conditions of crisis) and a much more rapid regression in countries where economic decline is most evident. Taking the entire world economy as a single entity, the following state of affairs will now prevail: after an economic recovery and expansion in one part of capitalism, coinciding with a generally weak recovery in the other part, there will be a prolonged depression in the leading countries and a permanent crisis in the others. In general and on the whole this will mean that the entire capitalist system, should no exceptional circumstances intervene, must enter into conditions involving gradual disintegration of the whole cyclical form of movement (assuming capitalism survives that long). Gradual economic development will come to a general halt, and more and more the tendency towards simple reproduction will prevail. Hence one can assert that if it does not lead to a world war, or is not interrupted by a technological revolution, a general economic crisis under monopolism must outgrow its economic framework and become a general social crisis of the entire historical system of capitalism.

The objective of the present theoretical analysis consists of revealing the outlines of the general social crisis of capitalist society as a whole, showing how it develops in imperialist conditions of reproduction and in the context of imperialism's unique economic cycle. On the other hand, such a study must also demonstrate how this crisis shatters the entire system—which has already been breached in the territory of the USSR—and why the first profound economic crisis of monopolism might bring to a close not merely a specific economic cycle, but also the entire *curriculum vitae* of capitalist society as a whole.

8. The Economic Crisis of the Monopolistic System and the World War

Our entire analysis leads to one very important political point. The extraordinarily acute shock that the capitalist system undergoes during a general economic crisis in the epoch of monopolism explains why every emerging world crisis has a tendency, as has frequently been observed, to grow over into an imperialist war. As will be seen from the

foregoing exposition, every such crisis begins in heavy industry, the leading sector of a capitalist economy, and directly impinges upon the interests of the most influential stratum of the bourgeoisie. This crisis creates a situation from which it is very difficult to extricate the entire system—incomparably more difficult than in the case of a typical crisis during the period of free competition. Hence the extreme intensification of imperialist contradictions during every crisis of monopolism. It is by no means coincidental that the first serious confrontation of an imperialist type on the territory of Europe, taking place in 1908 and almost leading to war between Germany and France, occurred during a period of crisis in 1907–1908. Despite its mixed and transitional character, this crisis already possessed many of the features of an imperialist crisis. In another context we shall consider in further detail the character of prewar crises, including the crisis of 1907–1908. Like the present crisis, that one too broke out abruptly in a country with the most highly developed monopolism. And like the present crisis, the one of 1907–1908 similarly had a tendency to develop into an imperialist war.[28]

It is far from coincidental that the outbreak of world war did take place when the next crisis of monopolism began to develop. In this case the crisis led to world war at its very outset, with the war representing an attempt to secure freer development for one part of capitalism's body by amputating another part. This result was in fact achieved. Within Europe, France developed its productive forces at the expense of Germany and Austria, while overseas the United States developed at the expense of all the rest of the capitalist world, above all at the expense of "victorious" England.

As we have mentioned previously, the crisis of 1920–1921 was one involving the liquidation of inflation. Its objective task consisted of settling the world economy into the new conditions created after the war. In that sense the crisis was not typically imperialist, and the ensuing depression, like that of 1924, did not develop into a general, world economic crisis. The crisis of 1930, in contrast, possesses all the characteristic features of a classical crisis of monopolism, one that might become the final blow to capitalism and kill off a decrepit organism. It is a remarkable fact that imperialism, as the highest stage of capitalism, has lasted more than 30 years, during which time there has not occurred a single profound economic crisis that would make it possible to discern its most characteristic features! But that very fact indicates that a universal economic crisis signifies catastrophe for the imperialist system in general. Such a catastrophe almost occurred in 1908. In 1914 it did occur—and it not only inflicted wounds upon

capitalism's body and bled it white, but also severed away one-sixth of it. Although the present world crisis is the first typical economic crisis of imperialism, it too might be interrupted by a military catastrophe, or by proletarian revolution as the prologue to war. Never since 1918 has there been such a stench of gunpowder and poison gases as in the years 1929–1931.

War or socialist revolution? That was the issue in 1914 and that is precisely the issue today.

The difference is that in 1914 the world did not know how to "withdraw" from positions leading to war or what it meant to find a way out along the road to revolution. In 1930 such knowledge does exist—at least among people who have any ability to comprehend what is happening. In the first place it is understood that a new world war will throw the world economy even further backwards than was the case during the war of 1914–1918.

And in the second place there is no way out of a new war apart from proletarian revolution. Still held captive by capitalism, the majority of mankind will be driven by cannon fire, machine-guns, and poison gases from one blind alley along the bloody road into another, from which there is even less chance of escape!

That is why chauvinism, a musical string that has been broken and haphazardly knotted together, has such little appeal whenever and wherever today's prewar imperialist press attempts to play upon it. And that is also why the bourgeoisie makes such a great effort, up to the final hour of the catastrophe, to put on one peace performance after another at Geneva and elsewhere. The bourgeoisie want to arouse the people with gunfire in the middle of the night. Before they can sort out what is happening or even rub their eyes open, they are to be driven to "defend themselves from attack"—that is to say, driven into perfectly equipped, mobile factories for the elimination of surplus population. That is why even the capitalist circles and those strata of the population who follow them are so somber. Even they have no faith that a war, by trimming off parts of the capitalist organism, will provide them with any solution. Meanwhile they are filled with dismal foreboding concerning the appearance of imperialist war's inevitable companion—civil war.

If a reef's progress is measured by the death of polyps, as Herzen figuratively commented, what reef will progress by the millions of polyps who will be exterminated by the second of a series of world wars? Should it be a reef that will tear apart the ship of capitalism in

civil war, then there is no sense for the defenders of capitalism to start it. And for those who are interested in the collapse of capitalism, it naturally makes more sense to strive for a new order along more direct and less bloody paths. A civil war resulted from the imperialist war in 1917; why then should it not be possible, 15 years later and after the experience of our Great October Revolution, to have a civil war that would avert an imperialist war?

However, another reef might also arise, which in the case of a balance of forces between the struggling classes would tear apart the whole ship of human culture. Speaking in theoretical terms such a possibility cannot be ruled out, with the result that the proletariat is obliged to undertake total mobilization of its forces and take advantage of every opportunity to bring about the destruction of capitalism. The fact that the possibility of such a tragic destruction of culture has declined significantly and continues to decline with each passing day, even if it has yet to disappear totally, is due primarily to the amazing successes of socialist construction in the USSR. The experience of our revolution has demonstrated that the path of proletarian revolution offers an escape from the blind alley into which imperialism has driven five-sixths of the world. Our socialist construction provides experimental proof that rupture of the capitalist integument lets loose an avalanche on the part of the productive forces, so that expanded reproduction is limited by nothing but the available means of production, natural resources and skilled labor power. By its very existence our system exposes with unprecedented clarity all the sources and extent of capitalism's rot, while simultaneously denouncing the protracted process of its liquidation.

No longer in a position to organize human labor, monopolistic capitalism will not permit others to do so, but instead merely tortures and mangles up to two billion people. Those who might organize labor differently, and have already demonstrated their ability to do so, are the Communists.

How and when the proletariat, led by the Bolsheviks, will acquire their rightful inheritance from capitalism, is a question that cannot be answered precisely by the economic analysis of monopolism which has concerned us thus far. Generally speaking an economic analysis, on its own, cannot provide such an answer, although it does permit approximate judgements. All indications suggest that the issue will be resolved within a very few years, whether or not the present crisis ends in the near future with a new world war and the outbreak of socialist revolu-

tion in the weakest links of the capitalist chain.

With complete reliability our science (as well as practice) tells us this is true. In contemporary bourgeois "science" (if one might use such a term) there are growing numbers of people disillusioned by capitalism but still fearful of communism. With no clear idea of where capitalism is going, this science is living through a period of either confusion or slow-witted decay. Its theories are not concerned with unravelling complicated questions, but primarily with muddling up those that are clear and simple. In its concrete work it avoids generalizations in every possible manner, a phenomenon that is perfectly understandable insofar as no one is interested in a theoretical analysis of the conditions leading to his own death or the methods of burial. This stupefaction of bourgeois thought is deeply anchored in social circumstances. Every genuinely scientific theory, such as our Marxist-Leninist theory, provides understanding beyond what can be seen on the surface and insight into the hidden laws of social phenomena. The socially based stupidity of bourgeois science, on the contrary, entails an ability to overlook the obvious and forget what happened yesterday. As for the question of what tomorrow will bring, here this science gives way to fortune tellers and card readers, who are now providing bourgeois economic science with very serious competition among capitalist circles in the United States and Europe.

One can only hope that in serious scientific and Marxist journals, and not merely in the pages of *Krokodil*,* there will appear a study whose theme will be: "The theory of reproduction and conjunctural predictions in bourgeois science, from Smith and Ricardo to card readers in the bourgeois quarters of New York."

PART FIVE

9. The World Economic Crisis of 1930-1931

As we have seen already, the world economic crisis of 1930 is the first typical crisis of imperialism. The imperialist character of the crisis of 1907 was expressed more in its international political effects than in the character of the economic cycle itself. Although the crisis erupted in a country with the most highly developed monopolism and appeared very suddenly—a pattern that results, as we have seen, from the very nature of the cycle under monopolism—nevertheless this crisis still had transitional features in common with a crisis from the epoch of free competition. But we shall have more to say in this respect elsewhere.

The crisis of monopolism that came to maturity in 1914 passed over into an imperialist war. In this way the world learned in practice just what an imperialist world war involves, but it did not have the experimental opportunity to become familiar with the most characteristic features of a world economic crisis under imperialism. Those features likewise remained hidden during the economic crisis of 1920–1921, involving the liquidation of inflation. On the other hand, that crisis helped the world economy to settle down on the basis of conditions created by the world war: the economic development of some countries was forcibly held back by the outcome of the conflict, while other capitalist countries acquired the opportunity to develop at the expense either of the vanquished or of countries exhausted by the war, all of this occurring in the context of a general slowdown of the whole system's tempo of development.

Signifying a blood-letting from one part of capitalism's body in order to permit freer development in another, the world war provided

extraordinary reinforcement to the unevenness of capitalist development and thereby created the preconditions for a unilateral and one-sided economic expansion in one portion of the world economy. The war hastened with unusual force a process apparent even before it began, namely, transfer of the world's economic center from Europe to America, with the result that a new, one-sided economic expansion could only begin on the other side of the ocean. The only exception in Europe was France, which received a strong impetus for development from the destruction of Germany and Austria and grew at their expense. This one-sided character of the world's development, resulting from the war, also predetermined both the character of the expansion and the source of a future crisis. It was perfectly inevitable that source should turn out to be the United States and its immediate economic periphery in the other countries of North and South America, which had been drawn into the expansion by the United States.

At this point our task consists of applying the general propositions concerning reproduction and crises under monopolism that we have developed in previous chapters, for the purpose of explaining the current world crisis. The present exposition will apply these propositions for purposes of concrete economic analysis and at the same time test them experimentally.

Before beginning our examination of the conditions in which the present world crisis originated, we must first of all, in keeping with our previous exposition, decide just what type of expansion we are dealing with: is it an expansion on the basis of a substantial, one-time construction of fixed capital, such as characterized classical expansions in the epoch of free competition; or is it one occurring in one part of the capitalist system at the expense of forestalling development in another part?

Because we are dealing with industrial expansion and crisis in the aftermath of world war, it should be clear even before we acquaint ourselves with the whole mass of concrete facts, that we are obliged in our investigation to rely primarily upon the second of the variants we have analyzed, or upon the variant which includes a one-sided industrial expansion whose impetus comes from a redistribution of markets to the advantage of one part of the capitalist entity at the expense of another. In this case the matter might have to do with new markets for exporting elements of fixed capital, new markets for exporting articles of consumption, and new territories for the export of capital.

Postwar economic literature has compiled an enormous volume of

concrete facts and economic studies to illustrate the systematic exclusion of Europe from a number of markets by United States capitalism both during and after the war. America's economic positions were strengthened within the capitalist countries of Europe, America was converted from Europe's debtor into its creditor, and so forth. From the enormous volume of factual material referring to this theme, we shall separate out only that which pertains directly to the conditions of expanded reproduction in the United States during and after the war. Unfortunately, I shall not be able to construct for the United States the sort of reproduction schemes which I myself would consider necessary for complete clarification of how the present world crisis came about. The statistical data of bourgeois states do not always provide answers to many of the questions that must be raised in a Marxist economic analysis. The information provided in the following pages will be sufficient, however, to demonstrate the main propositions adopted in this chapter.

Our study begins with statistics of foreign trade for the United States. We start with this question because it is precisely the rapid expansion of foreign trade by the United States since the war, and its consolidation of control over new markets, seized from Europe, that reveals the powerful impulse responsible for enormously accelerating the process of expanded reproduction in this country. Possessing a vast domestic market even before the war, the country acquired additional external stimuli to develop its production during the war and afterward. Then, on the basis of this additional external market, it developed and fortified a supplementary domestic market. The consequence was that at the expense of the tempo of development in other capitalist countries, above all belligerent Europe, the United States accomplished an acceleration of its own tempo of development which ensured its postwar industrial expansion, the final splash coming in the industrial expansion of 1927–1929.

We begin with summary data for United States foreign trade over the past 20 years [see table].

The figures demonstrate the enormous growth of United States foreign trade, exports above all, beginning with the year 1916. Although prices are given in dollars, and the dollar was always convertible into gold, it is true nevertheless that the growth of exports in natural terms was considerably smaller when one takes into account the enormous rise of gold prices during the war. But even taking this circumstance into account, the growth of exports, as can be seen by comparing the

Exports (including Reexports) and Imports
(in thousands of dollars)

Year	Exports	Imports	Price index (1926 = 100) (all commodities)
1909	1,663,011	1,311,920	67.6
1910	1,744,985	1,556,947	70.4
1911	2,049,320	1,527,226	64.9
1912	2,204,322	1,653,265	69.1
1913	2,465,884	1,813,008	69.8
1914	2,364,579	1,893,926	68.1
1915	2,768,589	1,674,170	69.5
1915 (6 mos.)	1,852,862	912,787	
1916	5,482,641	2,391,635	85.5
1917	6,233,513	2,952,468	117.5
1918	6,149,088	3,031,213	131.3
1919	7,920,426	3,904,365	138.6
1920	8,228,016	5,278,481	154.4
1921	4,485,031	2,509,148	97.6
1922	3,831,777	3,112,747	96.7
1923	4,167,493	3,792,066	100.6
1924	4,590,984	3,609,963	98.1
1925	4,909,848	4,226,589	103.5
1926	4,808,660	4,430,888	100.0
1927	4,865,375	4,184,742	95.4
1928	5,128,357	4,091,444	97.7
1929	5,240,995*	4,399,361†	96.5

Source: U.S. Chamber of Commerce, Bureau of Foreign and Domestic Commerce, *Statistical Abstract of the United States 1930*, 52nd number (Washington, D.C., U.S. Government Printing Office, 1930), p. 482 [exports], p. 483 [imports], p. 322 [price indexes].
*The average monthly figure for 1930 was 315.1 million, and for May 1931 it was 199.2 million.
†The average monthly figure for 1930 was 260 million, and for May 1931 it was 180.1 million.
Editor's note: Errors and omissions in the text have been corrected.—R.B.D.

figures with the price index, still turns out to be enormous.

Along with this enormous growth of exports during the war there also occurred a correspondingly enormous growth of exports when compared to the total sum of domestic production, a fact that has decisive importance for stimulating a more rapid tempo of expanded reproduction.

In order to characterize the share of exports in relation to domestic

production and compare the volume of exported industrial products with food products, we provide a table [opposite] that, among other things, very clearly portrays the industrialization of exports from the United States when compared to the situation prevailing 30 years earlier.

Besides giving absolute figures in terms of a changing measure of value, this table provides a percentage relation between the value of commodities being exported and the value of the entire domestic production. Because the rise of the price index applied to all commodities, this percentage share of exports in the total annual production eliminates the influence of price increases. Thus the dynamic of export growth and its share in domestic production is properly reflected in the above table. Below we shall provide another table, giving the percentage of exports in relation to exportable production, wherein the growth of exports is underlined all the more forcefully.

The two tables that we have provided indicate with perfect clarity that the years of world war were ones of enormous export growth from the United States, both in absolute figures and in relation to the country's total annual production. This fact represented an enormous impulse for raising the tempo of expanded reproduction. The basic limit to expanded capitalist reproduction, in accordance with the very structure of capitalism, and particularly in the epoch of monopolism, is the capacity of the market. Thus the expansion of exports could only reinforce the tempo of development in the United States, and this increase of tempo implied in turn an even more significant absolute growth on the part of the internal market.

Second, the tables we have cited also enable us to see the growing industrialization of exports from the United States. This fact has been adequately elucidated in the economic literature and we shall not dwell upon it here. The only exception comes in the war years, when the United States provided belligerent Europe with a huge quantity of articles of consumption at inflated prices, the consequence being an extraordinary increase of the share of such exports in the total. We shall only observe that this enormous price increase for articles of food and material, including agricultural material, promoted the swelling of agricultural production in the United States. Consequently, when prices fell after the war it was precisely the farm economy that experienced a particularly acute crisis in the United States.

But the dramatic increase of exports from the United States during the war had lasting consequences for the country's economy not only

Exports of Manufactured Goods in Relation to Total Production (in millions of dollars)

Year	Total net value	Exports of U.S. merchandise Amount	Percent
All manufactures:			
1899	7,100– 7,600	745	9.8–10.5
1904	9,400–10,000	863	8.6– 9.2
1909	12,800–13,700	1,001	7.3– 7.8
1914	15,000–16,200	1,505	9.3–10.0
1919	37,250–39,250	5,449	13.9–14.6
1921	26,300–27,700	2,722	9.8–10.3
1923	37,350–39,050	2,625	6.7– 7.0
1925	38,700–40,400	3,079	7.6– 8.0
1927	39,300–41,000	3,145	7.7– 8.0
Foodstuffs manufactures:			
1899	1,700– 1,900	312	16.4–18.4
1904	2,250– 2,550	296	11.6–13.2
1909	2,950– 3,450	281	8.1– 9.5
1914	3,750– 4,350	374	8.6–10.0
1919	9,500–10,700	1,963	18.3–20.7
1921	6,200– 6,900	685	9.9–11.0
1923	7,200– 7,950	583	7.3– 8.1
1925	7,950– 8,750	574	6.6– 7.2
1927	8,400– 9,200	463	5.0– 5.5
Other manufactures:			
1899	5,400– 5,700	433	7.6– 8.0
1904	7,150– 7,450	567	7.6– 7.9
1909	9,850–10,250	720	7.0– 7.3
1914	11,250–11,850	1,131	9.5–10.1
1919	27,750–28,550	3,486	12.2–12.6
1921	20,100–20,800	2,037	9.8–10.1
1923	30,150–31,100	2,042	6.6– 6.8
1925	30,750–31,650	2,505	7.9– 8.1
1927	30,900–31,800	2,682	8.4– 8.7

Source: U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, *Statistical Abstract of the United States 1930*, 52nd number (Washington, D.C., U.S. Government Printing Office, 1930), p. 465.
Editor's note: For purposes of clarity this table has been made more comprehensive than that given in Preobrazhensky's text, and errors in the text have been corrected.—R.B.D.

because of the enormous expansion of the internal market and establishment of control over an enormous part of Europe's foreign markets, but also because a decisive change took place in the United States balance of payments. Before the war the United States was a country with an active trade balance, a condition that still prevails up to the present. However this "active" character changed fundamentally in terms of its economic and social significance.

Prior to the war the United States had the active balance of a debtor country. It had to pay for capital investments by other countries, providing dividends on imported foreign capital and thereby bringing its balance of payments into equilibrium. During the war the trade balance of the United States was enormously active, reaching about 20 billion dollars over seven years. This was the active balance of a country swiftly converting from a debtor into a creditor; it was an instrument for establishing the country's financial dictatorship over the world. In terms of real commodities the 20 billion represented a substantially smaller sum due to the sharp fall of the purchasing power of gold, which in economic terms meant the following.

1) The United States paid off its prewar indebtedness in the most favorable of all possible conjunctures. 2) The new debtors of the United States increased their indebtedness when gold had declined in worth by one-half, whereas they had to make repayments after a sharp decline in the gold index of world prices. In that way, roughly speaking, one gold dollar became two; during the war and the initial postwar years they paid two dollars for the same commodity unit that now costs one dollar. 3) The purchasing and debtor countries paid the United States for these commodities with cash in the form of gold, which streamed into America; they sold their securities at half price (the securities representing prewar United States indebtedness to countries from whom it had imported capital); and finally, the debtor countries either piled up their obligations to the United States or else American capitalists undertook an enormous volume of new industrial construction in Europe and other countries.

This entire process of transferring the financial and economic center of the world from Europe to the other side of the ocean had diverse consequences from the viewpoint of the process of expanded reproduction in the United States, although in two respects its results were perfectly obvious.

In the first place, this process entailed in itself a massive sale of commodity values by the United States without any corresponding

purchases. Liquidating its own indebtedness, the United States sold without buying while the former creditors did nothing but buy. This pattern represented nothing other than creation of an enormous—albeit temporary—market for the United States. Although it is true that this process still has not ended, its golden days are over and the temporary additional stimulus for developing production in the United States has also ended. Given its balance of payments, which is that of a world creditor and enormous capital exporter, the United States could become a country with a considerably passive trade balance. But such a conversion is difficult, among other reasons, because the United States has been obliged to use every means to preserve the level of exports and tempo of economic development achieved by virtue of completely exceptional circumstances during and after the war. Here we are referring to the condition that prevailed prior to the world crisis.

A further consequence of the above-mentioned process was that the countries who had previously been creditors of the United States but had now become its debtors, began in every way possible to stimulate their own exports both to the United States and to markets in which the United States was a competitor, in order to achieve equilibrium in their own balance of payments. One result was to strengthen protectionist efforts in the United States; another was to place the United States, as Europe's creditor, in a hopeless contradiction both as an exporter and as a country with a generally rapid economic development. This circumstance was discussed long ago in the economic literature and served Germany as the principal motive for curtailing payment of its reparation obligations (insofar as motives were offered to America). Although it has considerable economic and political significance, this whole problem concerns us presently only from the viewpoint of changing conditions of reproduction for the United States. The change clearly worsened the situation for America in terms of foreign trade and could only intensify its efforts to achieve a redivision of the world. Such a redivision would guarantee, at the expense of other states, preservation of those tempos of economic development which had likewise been achieved at the expense of another part of the capitalist entity.

Now let us consider how United States exports developed to various other designated countries.

In order to avoid complicating the presentation with a great volume of statistical data, we shall provide information only for the most important territories and the most characteristic years, beginning with 1913, the year before the war.

Exports (including Reexports) and General
(in thousands of dollars)

Year	North America	South America	Europe	Asia
1913	647,413	146,148	1,479,075	140,441
1918	1,325,486	302,710	3,858,698	498,477
1919	1,295,792	441,748	5,187,666	771,717
1920	1,929,163	623,917	4,466,091	871,579
1926	1,176,482	443,507	2,310,144	564,543
1927	1,253,027	438,159	2,313,782	559,605
1928	1,321,367	480,815	2,374,916	654,514
1929	1,395,063	539,310	2,340,848	643,215

Source: [U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, *Statistical Abstract of the United States 1930*, 52nd number (Washington, D.C., U.S. Government Printing Office, 1930), p. 482.]
Editor's note: Preobrazhensky gave no source for this table. Errors in the text have been corrected.—R.B.D.

In addition, exports to Oceania grew from 53.7 million dollars in 1913 to 192 million in 1929, while exports to Africa increased from 29.1 million in 1913 to 130.5 million in 1929. These figures are all so expressive as to require no explanation. It must furthermore be added that the growth of capital exports from the United States to Canada, the countries of South America, India, China, etc., advanced with similar intensity. Of the European countries, England suffered relatively more than any other from this expansion on the part of the United States. England increased its own foreign trade much less quickly, even its trade with the Dominions and with such an important colony as India. Here are the totals for British exports to European countries, to countries outside of Europe, and to Britain's own possessions [see p. 125].

It is apparent from the figures that the United States not only took over Europe's extra-European markets during the war, but also retained those positions, having increased its exports by three to four times by comparison with the prewar position (leaving aside the rise of the world price index). Above all it was the United States that skimmed the cream from those countries during their comparatively rapid process of capitalist development—a process that for each country meant a growth of imports, including imports of foreign capital. The growth of exports to these countries from England, on the contrary, proceeded at an incomparably slower pace. As the figures show, however, some

British Exports
(in thousands of pounds sterling)

Year	To European countries	To foreign countries outside Europe	To British countries
1913	195,138	134,902	195,307
1928	225,122	170,789	327,668
1929	235,501	169,396	324,451
1930	203,247	119,203	248,103

Source: The Economist, February 28, 1931, pp. 432–33.

growth did occur all the same; and the developing countries also increased their imports from other European capitalist countries and from Japan. In general and on the whole this fact imposed a limit upon further economic expansion by the United States and extremely intensified both the problem of its economic rivalry with Europe and the threat of a new division of the world. For us it is important to observe here that the golden days of expansion have ended for the United States, which now faces, above all else, the problem of preserving positions already won.

But the safety-valve for accelerating capitalist development, enjoyed by this country during the war and for a decade thereafter, did its work. That conclusion is apparent from the dimensions of production growth in the United States in the period following the outbreak of war and also from the enormously increased capacity of its domestic market, a natural consequence of such growth.

Now let us turn to clarifying precisely this latter circumstance. For this purpose we employ the most fundamental factual data: population growth, increase of gross and net production, the relation between heavy and light industry, the wage fund, the rise of labor productivity, incomes of farmers, the volume and pattern of unproductive consumption, the volume of capital accumulation, the growth of fixed capital, and the character of the postwar crisis and the depression of 1927.

After a preliminary review of the conditions giving rise to the industrial recovery of 1927–1929, we shall then consider the influence of this expansion upon both the world economy and the sources of the crisis.

The volume of total production in the United States with respect to movable goods, and also the proportion of exports in total production, are apparent in the following table.

Production of Movable Goods
and Proportion Exported
(in millions of dollars)

Year	Agricultural products	Manu-factures	Mining	Total*	Exports U.S. merchandise	Percent of total
1899	3,355	4,831	600	9,767	1,253	12.8
1904	4,262	6,294	850	12,821	1,426	11.1
1909	6,472	8,529	1,238	18,040	1,701	9.4
1914	8,165	9,675	1,450	21,372	2,071	9.7
1919	17,677	24,748	3,158	49,208	7,750	15.7
1921	10,268	18,327	2,900	35,499	4,379	12.3
1923	12,382	25,846	4,300	47,240	4,091	8.7
1925	13,034	26,771	4,100	48,553	4,819	9.9
1927	13,000†	27,585	4,000	49,314	4,759	9.7

*Including freight receipts (railroad).
†Approximate.
Source: U.S. Department of Commerce, *Commerce Yearbook 1930* (8th number), Vol. I—United States (Washington, D.C., U.S. Government Printing Office, 1930), p. 89.
Editor's note: Errors in Preobrazhensky's text have been corrected.—R.B.D.

Although it does not give the entire gross production, this table does illustrate the enormous growth of production in the United States during and after the war. In this connection it is only necessary for us to remember that these figures are expressed in terms of value. The greatest increases of production coincided with periods in which price increases were most acute. In order therefore to evaluate correctly this table's real material content, one must take into account the change of the price index, cited earlier in another table, together with population growth. In that case the growth would appear much more modest and would be virtually stable in terms of per capita production.

The dynamic of production in the United States during and after the war can also be partly seen from data on the country's national income, which we have taken from the bulletin of March 1931 [see p. 127].

I shall not dwell upon a number of other figures, showing the growth of production in the United States during the war. These figures are commonly known with respect both to industry and agriculture, which received a powerful stimulus for development from the enormous price increases for wheat and agricultural material during the war. Farm

National and Per Capita Income

Year	National income in millions of dollars: In terms of the 1929 index	National income in millions of dollars: In 1913 dollars	Per capita income: In terms of the 1929 index	Per capita income: In 1913 dollars
1912	33.0	33.6	347	35[?]
1913	43.4	34.4	356	356
1920	74.3	37.5	697	352
1922	60.0	37.9	946	345
1924	70.0	43.7	649	386
1926	79.3	47.7	681	410
1927	78.1	48.2	661	408
1928	81.0	50.6	676	422
1929	84.0	52.5	692	433

Editor's note: Preobrazhensky mistakenly cites the March 1931 *Federal Reserve Bulletin* as the source for these data. The correct source could not be located and the data could not be verified.—R.B.D.

production, for instance, increased from 7,886 million dollars to 17,677 million dollars in the years 1913–1918. Although it is true that this production was sold at inflated prices, these were nevertheless gold prices, and belligerent *Europe paid for this production either with real gold (which streamed into America), through the sale of securities, or else by accumulating its indebtedness to America, which it then had to repay when the price index was lower.*

Once the war ended and the specific market acquired by the United States on the territory of belligerent Europe was eliminated, the economy of the United States then began to develop into the postwar period. In this regard it relied, on the one hand, on the external markets won during the war, and on the other hand, on the domestic market, which had grown to an extraordinary degree. It was precisely for this reason that the crisis of 1921, although quite profound in terms of the decline of both production and the price index, was nevertheless quite short-lived. While forcing the economy of the United States to reconstruct in conformity with the new circumstances, it did not hold back its further growth. The crisis lasted only a single year and after 1921 passed over into a depression. Then began the recovery of 1923, after which the economy of the United States found itself in a period of expansion right up to the summer of 1929—leaving aside the depression which was observed in the second half of 1927, but which did not develop any

further and will be discussed in more detail later.

From the preceding exposition the causes of the expansion of production in the United States during the war will be clear. The fundamental cause of the expansion lay in the safety-valve which the capitalist system of the United States acquired in the form of an expanded external market. After the war and the crisis of 1921, in contrast, the share of exports in United States production, despite a substantial absolute increase, returned in percentage terms to the prewar level. This fact demonstrates quite clearly that any further expansion in the United States depended primarily upon growth of the domestic market. Here we see an excellent illustration of that proposition in the theory of reproduction, which says that the main result and the main positive consequences of an expansion of foreign trade for the capitalist system lie not so much in the absolute figures of this expansion as in the fact that during this time the system creates a far broader, additional domestic market. The increase of production in the United States after the crisis of 1921 represents the embodiment of this favorable impulse. Despite the fact that American agriculture experienced a serious crisis, one far more serious than what occurred in industry, development of an internal market within industry itself outweighed the consequences of this crisis. Here we have a very convincing illustration of how incorrect was Rosa Luxemburg's theory of reproduction insofar as she attempted to criticize Marx on this point.

Now we turn to studying the period of expansion that began in the United States with the year 1923. The following table gives an impression of the movement of industrial production for these years up to and including 1930, taking the volume of production in 1923–1925 as 100 and adjusting for seasonal variations in all of the calculations [see p. 129].

Here we have an outward, material expression of that entire movement forward, which was interrupted by the depression of 1924 and 1927. The task of our investigation is to discover the internal motive forces of this whole process.

What was the foundation of this whole expansion of the United States economy up to the crisis of 1930?

If one speaks of the general material preconditions of this movement, then it is necessary to consider the dynamic of the volume of labor power, the level of wages, the dynamic of farm incomes, the

Industrial Production: Index Numbers
Adjusted for Seasonal Variation
(1923–1925 average = 100)

	Industrial production*							
Month	1923	1924	1925	1926	1927	1928	1929	1930
January	100	99	105	107	106	106	118	104
February	100	102	105	106	108	108	118	107
March	103	100	104	107	111	109	119	104
April	107	95	103	107	108	109	122	107
May	106	89	103	106	111	109	124	104
June	105	85	102	108	108	109	126	100
July	104	84	103	107	106	109	124	95
August	102	89	103	110	106	111	123	91
September	100	94	101	111	105	114	122	91
October	100	95	104	111	103	116	118	87
November	98	97	107	109	100	116	108	85
December	97	101	109	106	101	117	101	82 (p)

Source: *Federal Reserve Bulletin*, Vol. 17, February 1931 (Washington, D.C., U.S. Government Printing Office, 1931), p. 107.
*Revised in January 1931.
p = preliminary.

dimensions of foreign trade, the increase of industry's production apparatus, and the export of capital.

If we take the number of wage and salary earners in the manufacturing industry of the United States we come up with the following picture [see p. 130].

We see from this table that although the number of workers employed in industry grew during the years of expansion by almost one and one-half million over the prewar position, it nevertheless declined when compared to the closing years of the war. In any event, after 1922 and during the years of expansion the number of workers remained almost constant. By way of contrast the average real wage per worker rose, as will be seen from the following table provided by Kuczynski [see p. 130].

Now let us consider how matters stood with farm demand and farm supply. The conditions with respect to farm supply can be seen from the following figures [see p. 131].

Number of Wage and Salary Earners in U.S. Manufacturing Industry (in thousands)

Year	Total	Year	Total
1913	8,400	1921	8,251
1914	8,163	1922	9,030
1915	8,470	1923	10,267
1916	9,960	1924	9,600
1917	10,770	1925	9,858
1918	11,120	1926	9,975
1919	10,669	1927	9,730
1920	10,700	1928	9,580*
		1929	9,850*

Source: [*Recent Economic Changes in the United States*, Report of the Committee on Recent Economic Changes of the President's Conference on Unemployment. Herbert Hoover, Chairman. Vol. II (New York: McGraw-Hill, 1929), p. 450.]
Editor's note: Preobrazhensky gave no source for this table. Errors in the text have been corrected, except where the source of the data could not be determined (asterisks indicate unverified figures).—R.B.D.

Average Annual Income per Worker in Manufacturing

Year	Nominal income in dollars	Real income in dollars	Index of real income
1899	426.15	426.15	100
1904	477.37	427.75	100.4
1909	518.07	392.77	92.2
1914	579.62	384.62	90.3
1919	1,157.98	424.95	99.7
1920	1,391.07	446.43	104.8
1921	1,180.77	457.66	107.4
1922	1,146.98	471.04	110.5
1923	1,254.17	503.08	118.1
1924	1,276.37	518.01	121.6
1925	1,279.78	504.65	118.4
1926	1,298.93	512.20	120.2
1927	1,301.30	519.07	121.8

Source: Jürgen Kuczynski, *Löhne und Konjunktur in Amerika* (Berlin-Schlachtensee, Verlag der Finanzpolitischen Korrespondenz, 1928), pp. 5, 7.
Editor's note: Errors in the text have been corrected.—R.B.D.

Estimated Value of Farm Products
(in millions of dollars)

Year	Animal products	Crops	Total, excluding crops fed to livestock
1912	3,778	6,799	7,467
1913	4,099	6,717	7,886
1914	4,249	7,268	8,165
1915	4,303	7,957	8,638
1916	4,862	10,305	10,359
1917	6,539	14,277	13,949
1918	8,082	14,814	16,504
1919	8,275	16,561	17,677
1920	7,709	11,578	14,811
1921	5,589	7,759	10,268
1922	5,651	9,430	11,211
1923	6,271	10,401	12,382
1924	5,902	10,770	12,219
1925	6,647	10,170	13,034
1926	7,300	9,266	12,985

Source: U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, *Statistical Abstract of the United States 1930*, 52nd number (Washington, D.C., U.S. Government Printing Office, 1930), p. 649.
Editor's note: Errors in the text have been corrected.—R.B.D.

In this table we see that after making a correction for the rising index of prices for farm products by comparison with the prewar index, farm supply still grew, but the growth was far from proportional to the increase of industrial production during the same period.

A growth of demand from workers and farmers, for both consumption and production purposes, plays a very essential role in expanding the domestic market. However, this demand was not decisive; rather it was the increase of production demand within industry itself together with the growth of unproductive consumption.

Here the reader must keep in mind what we said in the theoretical part of our work concerning unproductive consumption under imperialism. Naturally, growth of unproductive consumption does represent growth of the domestic market. However, this item has a very specific importance for understanding the dynamic of the entire process of expanded reproduction. Growth of this demand is neither a factor of economic development nor a stimulus to such development, but instead results from its slowdown. Had unproductive consumption not increased as it did in the United States, then with the same volume of

gross production there would have been a larger portion of productive accumulation at any given moment—provided the accumulation was compatible with the market's capacity.

But the most significant element of expansion for the internal market was obviously the growth of demand on the part of industry itself for new fixed capital and other means of production. When the United States found itself facing a sudden increase of exports during the war, it covered the increased demand through more intensive utilization of the available equipment. However, the further expansion of production demanded an enormous increase of fixed capital and reserves of fixed capital. Just how great the growth of domestic demand for fixed capital must have been, can be seen by comparing the percentage utilization of available capital before the war, during the wartime expansion, and during the expansion that followed the war. For example, the utilization of available equipment for production of high-quality steel, being 67.2% in 1913, rises to 106.5% in 1916 and to 104.5% in 1918, only to fall in 1926 to 61.8%. The fact that steel output grew over this period in absolute figures gives us a measure of the *new fixed capital* created in this branch. In other branches matters were much the same.[29]

Many economists have wracked their brains over the question of just what provided the basis for industrial development in the United States after the crisis of 1921. The dimension of individual consumption, or more accurately, the growth of this consumption, was by no means proportional to the increase of gross production. The explanation is to be found in growth of the domestic market, which capitalist industry creates for itself by increasing its demand for means of production. By recalling the theoretical part of our book the reader will see what an enormous stimulus is provided for expansion of the entire economic system by a significant increase of demand for fixed capital. In any event, those studies that deal with the American economy during the period of its postwar expansion and ignore this side of the matter, either cannot appreciate its significance in the history of that expansion or, alternatively, are generally incapable of understanding anything about the causes of this expansion or of the ensuing crisis.

But besides the expanding internal market of the United States itself, an important role was also played by two other factors, namely, the not particularly rapid but still systematic growth of exports from the United States after the crisis of 1921, and also the export of American capital.

As far as the growth of exports is concerned, we have seen that they

increased from 3,832 million dollars in 1922 to 5,241 million dollars in 1929. This growth of commodity exports, naturally, was of decisive significance, as was the excess of exports over imports. In 1922 imports came to 3,113 million dollars, and in 1929 to 4,399 million. The increase of American capital exports was only significant insofar as the country continued to maintain an active trade balance after being converted from a debtor of other countries into a creditor of the entire world. For a country that is not increasing its own indebtedness, but instead is increasing the indebtedness of other countries to itself, an active trade balance in essence represents growth of a supplementary market. Obviously a country that increases its foreign investments, with an increasingly passive trade balance, experiences not an expansion but rather a contraction of its market for foreign sales, or in any case a relative contraction.

These are the general factors that conditioned the industrial expansion of the United States after the crisis of 1921.

Now we must turn to the most important part of our exposition, and with the help of a more detailed analysis show the origins of the crisis that began in the United States in the second half of 1929.

Interrupted by the depression of 1924, the postwar industrial expansion continued in the United States until the first half of 1927. A depression began to appear in 1927, including the following features. Up until this year the industry of the United States had developed on the basis of the internal market, more or less exhausting the possibilities it offered. On the other hand, the United States provoked an increased production of materials and means of consumption in its economic periphery, consisting of Canada, South America, and other countries producing materials and means of consumption. Taking into account the dynamic of agricultural prices and the material dimensions of production in American light industry, one would have to say 1927 would be the year in which the industrial conjuncture must arrive at a turning point. By 1927 all the sources of further expansion were more or less exhausted. Having been sustained by a growing domestic market, the wartime momentum of production in the United States had to come to its natural end. Had we been dealing with a country that was developing in conditions of free competition, it would have been precisely in 1927 that a general industrial crisis had to occur. Another factor pointing in this same direction was the depressed condition of production in countries drawn into the expansion by the United States, particularly countries producing industrial materials.

But at this point there occurred the most interesting feature in the development of the cycle in the United States, namely, the fact that the entire system went over to a rapid increase of its fixed capital, raising its reserves to the level characteristic of monopolism. The introduction and operation of more advanced equipment began, and this circumstance, together with the widely developed practice of selling on credit in the consumer market, not only suppressed the depression which began in 1927 but also assured American industry an additional expansion extending over more than two years. In this circumstance one finds the explanation for all those specific phenomena that have taken place in the United States both before and during the crisis.

The point at which we have now arrived in our exposition has enormous significance both for understanding the causes of the world crisis and for testing our theory of the economic cycle under imperialism. We must, therefore, deal with this aspect of the matter in more detail.

Accordingly, I shall here set out two propositions. First, I assert that the period of greatest production expansion in the United States prior to the crisis was one of expansion in heavy industry, which in turn drew contiguous branches into this supplementary expansion, delayed the crisis in light industry, and guaranteed increased credit sales of articles of consumption (especially automobiles). Second, I suggest that the crisis itself began in heavy industry, after the process of expanding and renewing fixed capital was basically completed.

In order to illustrate these propositions we shall begin with the dynamic of employed labor power. The situation can be characterized by citing the changing figures for labor power in the machine-building industry on the one hand, and in the textile industry on the other, being the largest and most indicative branch of light industry.

The greatest growth comes in machine building, particularly in the automobile industry (during 1928 and the first part of 1929), together with the rubber industry, followed by iron, steel, and the production of other metals; in other words, all those industries directly servicing machine building. In the textile industry, on the contrary, we see that the level of employed labor power was not significantly different from that of 1923–1925, taken as 100. The same held true in all the other branches of light industry, such as the leather, food and tobacco industry, etc. Either these branches did not show any increase of employed labor power, or else such increase as did occur was completely out of proportion to the increase in machine building.[30]

Index of Factory Payrolls and Employment by Groups (1923–1925 = 100 without seasonal adjustment)

Year and month	All manufacturing industries		Machinery		Textiles	
	Payroll	Employment	Payroll	Employment	Payroll	Employment
1928:						
January	95.7	94.2	94.5	92.8	101.0	99.7
February	101.1	95.7	99.0	94.1	105.0	100.7
March	102.5	96.6	101.9	95.5	104.0	100.3
April	100.3	96.0	101.8	95.9	95.3	97.0
May	100.8	95.7	104.2	97.4	92.0	93.4
June	100.9	96.2	106.1	98.2	90.9	91.8
July	98.3	95.7	102.5	97.9	85.8	87.8
August	102.5	98.3	105.3	99.5	90.2	89.4
September	104.2	100.3	106.0	101.4	94.9	92.6
October	107.5	100.2	111.3	102.8	101.0	95.7
November	103.6	98.8	110.3	103.8	96.7	96.2
December	104.2	98.1	114.0	105.2	100.3	97.0
1929:						
January	100.9	97.4	112.3	106.7	97.0	95.9
February	108.4	99.7	120.7	110.4	103.6	98.0
March	111.1	101.3	126.5	113.8	108.8	101.1
April	111.7	101.8	129.5	116.7	103.2	99.3
May	111.5	101.6	131.9	119.1	99.3	97.3
June	109.2	101.2	131.6	120.8	97.8	96.3
July	104.8	100.7	128.2	121.5	90.4	91.5
August	109.4	102.0	127.5	119.4	97.4	94.2
September	110.5	103.4	127.9	119.5	103.0	98.4
October	110.0	102.1	129.0	118.7	104.8	99.8
November	102.0	98.2	121.6	115.0	96.2	97.1
December	98.7	94.8	119.9	112.1	93.8	94.3

Source: *Sixteenth Annual Report of the Federal Reserve Board* (covering operations for the year 1929) (Washington, D.C.: U.S. Government Printing Office, 1930), pp. 212–13.
Editor's note: Preobrazhensky's text provides the index for payrolls but refers to the table as showing the index of employment. In fact the index for employment comes on the next page of the source that Preobrazhensky is using. We have combined the two tables in order to retain the data in Preobrazhensky's text and also provide the real index of employment.—R.B.D.

A second indicator is changes in the level of unfulfilled orders. Here we shall cite a table characterizing the situation from 1925, along with monthly data for 1929. The latter data will be necessary primarily for our next purpose, which is to characterize the development of the crisis as such.

Changes in Production, Stocks, and Unfulfilled Orders in the Industrial Machinery and Cotton Textile Industries

Year	Unfulfilled orders for machine tools end mo. (relative to avg. shipments) (1922–1924)	Cotton textiles: Stocks, end of the month (thousands of yards)	Cotton textiles: Unfulfilled orders, end of the month (thousands of yards)
1925 mo. avg.	290		
1926 mo. avg.	294	257,103	278,644
1927 mo. avg.	227	214,840	454,800
1928 mo. avg.	418	414,015	358,851
1929 mo. avg.	684	381,272	410,087
Months:			
1929			
January	676	389,195	440,585
February	702	372,950	472,176
March	687	345,311	504,876
April	718	352,091	430,298
May	721	367,340	382,512
June	722	401,260	358,748
July	694	382,920	368,858
August	693	364,060	355,095
September	709	345,043	438,952
October	697	362,657	395,698
November	629	431,426	342,232
December	561	461,013	431,018
1930			
April	407	444,736	357,328
June	282	466,368	219,040

Source: U.S. Department of Commerce, *Survey of Current Business* (Washington, D.C.), August 1930, p. 32 [cotton textiles], p. 42 [machine tools].
Editor's note: Errors and omissions in the text have been corrected.—R.B.D.

The data in this table demonstrate that the volume of unfulfilled orders for machine equipment increased abruptly over previous years precisely in 1928, which was a typical year of recovery in the construction of new fixed capital. In 1929 the percentage of unfulfilled orders continues to grow, although in June the same turning point can be seen as occurs in the expansion throughout heavy industry.

If we take the volume of unfulfilled orders in the cotton textile industry, 1928 provides a sudden contraction by comparison with the previous year. Although 1929 shows an increase, it did not reach the level of 1927. Here we see clear proof that within the general context of industrial recovery the general rise of business activity in heavy and light industry took place in different conditions. While a strong expansion was evident in heavy industry, light industry merely held its own; and it was only in 1929, under the influence of recovery in heavy industry and on the very eve of the crisis, that an advance occurred. These facts demonstrate that the conjuncture was different in these basic sectors during the final years of the expansion. The main link of the entire economy was heavy industry, which delayed conversion of the 1927 depression into a crisis. The data for inventories in the cotton textile industry provide roughly the same picture. During 1928, the year of most rapid expansion in heavy industry, the volume of inventories increased abruptly compared to the previous year and only slightly declined in 1929, apparently under the influence of the recovery in heavy industry (although it is true that in this case one must also take seasonal variations into consideration).

In the changing level of registered orders for electrical equipment we find the very same picture. In this very important branch of machine building the situation developed as follows [see p. 138].

These figures indicate the same pattern of a sharp increase of orders for electrical equipment precisely in the years 1928 and 1929.

The branch most closely connected with production of fixed capital is metallurgy, above all steel smelting. Although steel smelting hardly changed in 1925, 1926, and 1927, when compared to 1922,* a significant increase did occur in 1928 and the first half of 1929. The same is true to a lesser degree in the case of smelting iron and extracting copper. At a later point, when we are concerned with determining the chronological moment of the turn in the conjuncture towards the crisis, we shall provide more detailed statistics.

Without pausing to give a statistical clarification of the position in a

New Orders For Electrical Goods
(reports by 86 manufacturers) (thousands of dollars)

Year and month	Electrical goods
1923 monthly average	215,925
1924 monthly average	211,139
1925 monthly average	228,059
1926 monthly average	245,522
1927 monthly average	231,681
1928 monthly average	257,430
1929—March	322,425
June	340,863
September	338,170
December	288,696
1930—March	298,733
June	276,756

Source: U.S. Department of Commerce, *Survey of Current Business* (Washington, D.C.), August 1930, p. 45.
Editor's note: Preobrazhensky mistook the monthly averages (1923–28) for quarterly totals. Multiplying these data by four he gave what he therefore thought were annual totals. Similarly, he added the monthly data for the four months shown in 1929 to derive what he mistakenly believed was an annual total. Although these data were mistakenly presented in the text, the correct figures (cited in the above table) confirm the interpretation he wished to provide, namely, that orders significantly increased in 1928 and 1929.—R.B.D.

number of other branches—all of the figures more or less confirm our position—here we shall mention only one interesting fact of a nonstatistical nature. When Soviet organs were placing orders in the United States during 1928, they encountered problems finding timely accommodation precisely in the area of machine equipment. That happened because the enterprises manufacturing fixed capital were fully burdened with orders and could not guarantee timely completion of new orders from abroad.

We consider it a fully established fact, therefore, that the industrial crisis in the United States, having matured already by 1927, was delayed due to a change in the character of the cycle under imperialism: the delay took place because of the transfer of orders for fixed capital to the final stage of the industrial expansion.

Before proceeding, here we should like to observe an interesting circumstance. Approximately the identical state of affairs can now be seen in France. With depressed conditions in both agriculture and light

industry, during 1930 French heavy industry found itself in a period of expansion. In the example of this country as well, therefore, one can detect the same change in the character of the cycle. This fact has enormous significance for predicting the conjuncture in France: the country has yet to enter into a stage of genuine crisis, but it will be gripped by crisis all the same once the process of expanding fixed capital has been completed.

A second peculiarity of the conjuncture in the United States prior to the crisis was the fact that the industrial expansion was not accompanied at this time by rising prices. Even for steel products there was no discernible price increase, as will be seen from the following table.

Prices for Iron and Steel
(average of monthly prices for 14 products)
(dollars per long ton)

Year	Price
1925	38.83
1926	38.27
1927	36.41
1928	35.49
1929	36.49

Source: U.S. Department of Commerce, *Survey of Current Business* (Washington, D.C.), August 1930, p. 36.

An economist familiar with the basic moments in the history of the conjuncture in capitalist economies over the last century will know very well that an industrial expansion is invariably accompanied by rising prices, the most typical price movements taking place in metallurgical production. To all economists concerned with the conjuncture of the American economy this absence of a sharp price increase during the industrial expansion seemed to present an incomprehensible riddle. From the viewpoint of our theory of the economic cycle under imperialism, however, this fact is very simply explained. The expansion of heavy industry in the United States during 1928–1929 was connected with an increase of fixed-capital reserves. Because the issue was precisely one of increasing reserves, in this case there could not occur the same stock-jobbing and strong pressure on market supplies as was so

characteristic of industrial expansion in the epoch of free competition, at least insofar as production of the means of production is concerned.

From all that we have said above it is clear that at least two of the riddles in the history of the conjuncture in the United States during recent years have now been fully explained—both the riddle of why the depression of 1927 was smothered by a new expansion, and also the riddle of price stability in the course of the expansion.

But from what has been said above it is also possible to explain a third riddle, namely, the abruptness of the rupture in the conjuncture and the so completely unexpected development of the general crisis. The crisis broke out when the process of expanding fixed capital was for the most part completed. American heavy industry, whose development postponed the crisis in 1927, in turn became the leading source of crisis and breakdown. The opinion is widespread in bourgeois economic literature that the current world crisis began in countries producing material, and not in United States industry. In support of this position reference is made to the depressed condition existing on material markets even before the second half of 1929. In itself, of course, this fact is not open to doubt. However, this fact is used to produce completely unfounded conclusions, such as those just mentioned. The material-producing countries are the economic periphery of the countries that process this material and possess powerful heavy industrial centers. A depressed condition in the markets of these countries indicates comparatively slow development in countries using the material, with the implication that the problem must be focused in the latter.

The actual state of affairs was the following. The wartime and postwar expansion of the United States provoked a whole series of countries to expand material production. Because the industrial recovery following the world war had a one-sided character in the context of the world economy as a whole, this production of material exceeded the limits of demand. If all the other countries, in addition to the United States and France, had developed their production in the same proportions as these two states, then not only would there have been no depression in the market for materials, but instead there would be a goods famine.

However, the depressed condition in material markets did not develop into a general crisis because the decisive blow had yet to be struck by the heavy industry of the United States. This heavy industry postponed the crisis for more than two years, preserved a high conjuncture in American light industry, and thereby did not permit depression in the

markets for material to grow into a grave sales crisis. But once the recovery came to an end in heavy industry the change of conjuncture spread into light industry and struck a heavy blow at countries producing material for light industry.

Heavy industrial expansion in the United States not only delayed a crisis in countries producing material, but even provoked some of them into significantly expanding production. Taking production of material in the countries of North America, South America, and Asia in 1926 to be 100, the position in 1927 and 1928 can be expressed in percentages as follows.

Raw Material Production Indexes
(base: 1926 = 100)

Continent	1926	1927	1928
North America	100	94	98
South America	100	134	141
Asia	100	105	107

Source: [League of Nations, Economic and Financial Section, *Memorandum on Production and Trade, 1923–1928/29* (Geneva, June 1930), p. 21.]
Editor's note: Preobrazhensky gave no source for this table.—R.B.D.

But did the initial turning point in the conjuncture really begin with heavy industry in the United States, or should it be associated with the stock-exchange panic of October 1929?

By now every economist who studies the figures closely must see quite clearly that the critical condition began before the October panic, which in turn only developed after the depression began, and did so precisely *because* the depression began.

Before we proceed to demonstrate this fact, it will be interesting to make one historical comparison. Leaving aside the postwar crisis of 1921, the closest forerunner of the present crisis in the United States is the one which broke out in this country during 1907.

It is especially interesting to observe a striking coincidence: a particularly rapid development of the crisis began in 1907, and in that case too it followed a stock-exchange panic, which also began in the month of October. But study of the conditions giving birth to the crisis of 1907 indicates that it began *prior to the stock-exchange panic* and that heavy

industry entered into a period of depression several months before October. Taking the smelting of iron in the United States from 1890 to 1914 as 100, the data for production of this metal from month to month in 1907 give the following picture.

U.S. Pig Iron Production in 1907
(1890–1914 = 100)

Month	Index	Month	Index
January	119.2	July	124.1
February	118.3	August	120.6
March	130.4	September	116.2
April	117.9	October	116.8
May	121.9	November	96.2
June	124.1	December	63.7

Source: Harry Jerome, *Migration and Business Cycles* (New York: National Bureau of Economic Research, 1926), p. 250.
Editor's note: Errors in the text have been corrected.—R.B.D.

At the same time the index of wholesale prices, having risen up to and including the second quarter, showed a decline beginning in the third quarter. Thus we see that the conjunctural decline began in heavy industry as much as half a year before the October panic, and the same holds true of the prior decline of the average price level. The October panic broke out after the initial elements of depression were already at hand. In 1929 we have a striking analogy with the conjuncture of 1907 in the same respect. The decline of the conjuncture in 1929 begins before the October panic, although the acute rupture in a downward direction only follows October, just as it did in 1907.

We have previously cited the index of employed labor power in machine building and in the textile industry. From that earlier table the reader can see that the reduction of labor power began with machine building as early as June 1929, whereas an increase occurred in the textile industry from July to October inclusive. We refer only to those

two most characteristic branches because the situation in other branches of both heavy and light industry was more or less analogous. For example, boot and shoe production in 1929 gives the following figures.

U.S. Boot and Shoe Production in 1929
(millions of pairs)

Month	Total	Month	Total
January	27.2	July	30.2
February	27.7	August	36.4
March	30.9	September	34.8
April	29.4	October	37.2
May	29.2	November	27.7
June	28.1	December	22.5

Source: *The Annalist*, January 16, 1931, p. 218.
Editor's note: Errors in the text have been corrected.—R.B.D.

The same pattern can be seen in the data concerning volume of production of coal, iron, steel, copper, and oil, as shown by the following table [see p. 144].

These tables also indicate that the decline of the conjuncture in metallurgy began before both the October stock-exchange crash and the change of conjuncture in light industry. For the sake of providing a complete picture we refer as well to a month-by-month table of building contracts for 1929 and 1930 [see p. 145].

From this table it will be seen that industrial construction is the most indicative and shows a decline after May 1929; in housing construction the sharp decline comes after July, although in this connection one must also take into account the influence of purely seasonal factors. With respect to such an important branch of machine building as the automobile industry, here the decline also began before the October panic and before the crisis gripped light industry. As far as the general industrial index is concerned, it shows a decline beginning in July.

Industrial Production in the United States

Period: Monthly avg. and monthly	In thousands of metric tons			In metric tons	In thousands of barrels
	coal	iron	steel	copper	oil
1920	49,764	3,069	3,461	45,702	36,911
1921	38,283	1,389	1,628	21,716	39,349
1922	36,057	2,271	2,927	42,757	46,461
1923	49,736	3,363	3,682	63,029	61,034
1924	43,213	2,614	3,117	67,923	59,495
1925	43,988	3,058	3,737	71,617	63,645
1926	49,729	3,277	3,794	74,402	64,240
1927	45,197	3,036	3,675	73,229	75,094
1928	43,052	3,167	4,222	80,142	75,122
1929	45,510	3,580	4,599	89,151	83,800
1930	40,047	2,659	3,357	61,991	74,689
1930: monthly					
January	51,543	2,873	3,857	76,613	79,453
February	41,469	2,884	4,144	67,217	74,427
March	36,581	3,298	4,369	71,227	77,384
April	36,991	3,233	4,221	69,651	77,175
May	38,012	3,285	4,089	68,888	80,176
June	35,287	2,981	3,495	62,736	76,513
July	36,626	2,682	2,980	61,360	76,554
August	37,967	2,564	3,145	60,507	74,853
September	39,848	2,313	2,914	62,130	70,977
October	46,517	2,200	2,764	63,883	72,696
November	39,307	1,897	2,270	58,800	68,174
December	41,551	1,692	2,040	54,451	66,985

Source: League of Nations, *Monthly Bulletin of Statistics*, Vol. XII (Geneva, January 1931), pp. 13–15.
Editor's note: Errors in the text have been corrected.—R.B.D.

Building Contracts Awarded by Types of Building
(in millions of dollars)

	Total		Residential		Industrial	
Month	1929	1930	1929	1930	1929	1930
January	406.5*	324.0	183.1	66.6	63.1	38.3
February	361.3	317.1	129.5	74.8	56.1	33.5
March	484.6	456.1	196.9	101.5	55.8	74.3
April	642.1	482.9	256.8	123.1	68.2	38.1
May	587.8	457.4	192.0	116.6	80.8	54.6
June	529.9	600.6	173.8	96.8	70.0	93.6
July	652.4	366.9	199.9	84.3	66.6	35.2
August	488.9	346.6	146.1	82.7	75.3	20.7
September	444.4	331.9	117.4	98.5	52.6	31.7
October	445.6	336.7	137.7	104.7	60.9	16.1
November	391.0	253.6	113.5	80.8	39.7	17.6*
December	316.4	249.4	114.0	70.9	67.4	15.2
Year	5,750.8*	4,523.1	1,915.7	1,101.3	756.5	468.9

Source: *Federal Reserve Bulletin*, Vol. 17, February 1931 (Washington, D.C., U.S. Government Printing Office, 1931), p. 71.
*Revised.

The following picture emerges from all that has been said. Heavy industry delayed the onset of crisis in 1927. Heavy industry not only allowed light industry to preserve the level already attained, but also drew it into the supplementary expansion towards the end of the industrial cycle. Once the change of conjuncture began in heavy industry, light industry did not react to the contraction and automatically preserved the tempo already adopted (with due regard being paid to seasonal influences). When the turn towards crisis had already begun, leading to the stock-exchange panic in the month of October, this event provided the impulse for a turn of the whole conjuncture in the direction of the crisis.

After the state of crisis had already become perfectly clear, unsuccessful attempts were made to maintain a high conjuncture in the spring of 1930. Among such attempts one must point to a sudden increase of construction in the form of public buildings and other such projects financed by the state and municipal budgets. The following table

Indexes of Production of Manufactures and Minerals in 1929
(adjusted for seasonal variations and for
the number of working days in the month)
(monthly average 1923–1925 = 100)

Month	Industrial commodities, total	Minerals	Iron and steel	Food products* 1928	Food products* 1929	Cement, brick, and glass	Rubber tires	Automobiles	Leather and shoes	Textiles
January	117	118	117	103	103	134	148	150	95	116
February	116	120	126	110	101	123	152	148	98	113
March	120	107	132	105	96	135	152	159	99	116
April	123	115	135	98	102	127	161	153	97	120
May	125	116	145	96	97	124	158	148	101	121
June	129	113	155	93	96	134	162	162	113	121
July	126	114	151	89	96	138	141	142	114	118
August	124	114	148	90	99	142	119	143	116	120
September	122	118	139	95	98	143	116	133	116	116
October	117	118	124	98	96	141	114	113	113	118
November	105	110	100	102	96	130	94	81	105	108
December	96	116	90	104	95	117	80	49	93	96

Source: U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, *Statistical Abstract of the United States 1930*, 52nd number (Washington, D.C., U.S. Government Printing Office, 1930), p. 828.
*The average figure for the food industry was 98 in 1925, 97 in 1926, 96 in 1927, 99 in 1928, and 98 in 1929.

describes more completely the whole picture of the origin of the crisis and the leading role of heavy industry in the declining conjuncture. Unfortunately, this table lacks summary data for machine building, but we have already elucidated the state of affairs in that industry for the year in question.

This table again confirms the conclusion that the crisis began with heavy industry. A particularly important role in bringing about the turn of the conjuncture was played by declining production in the automobile industry.

Looking at the automobile industry, insofar as it manufactures trucks it is involved exclusively with means of production which enter into productive use in the form of means of transportation for shipping commodities. A light vehicle, on the other hand, can be viewed partly as a means of consumption—and what is more important, in the majority of cases it is an article of individual demand. The reduction of demand for light automobiles indicates either a very significant overproduction during the recent period, or else a reduction caused by curtailment of effective demand in general. Because it was hardly possible to speak of the latter phenomenon up to the summer of 1929, it seems much more probable that we are dealing with the former; that is, overproduction in relation to constant effective demand on the part of society as a whole. However, this overproduction was part of the whole expansion of 1927–1929, and the reequipping of fixed capital in the automobile industry also took place during this period.

The next unique feature of the crisis in the United States is the absence for the first time of an acute credit crisis.

In this respect we are speaking of a credit crisis in the proper sense, not of panic on the money market or the further decline of security prices, which continued even after October and was interrupted from time to time by countervailing tendencies. We shall address this issue in more detail elsewhere, in the next instalment of our book, wherein problems in the sphere of circulation will be elaborated. For the present we offer the following observation: the reasons for the absence of an acute credit crisis during the first one and one-half to two years of the crisis, if one does not count the bankruptcies that have occurred to date, have already been partly explained in the economic literature, including the work of Comrade Varga.* Besides the causes already pointed out by Varga and others, I should like to refer here to certain additional circumstances which have yet to receive attention.

The reasons for a relocation in the cycle of the moment of credit and monetary crisis include the following.

1) The enormous monopolistic associations, which presently control the economic life of the leading capitalist countries, lose a portion of their capital during a crisis. But they do not lose their credit, and in general they survive the first onslaught of the tempest associated with the crisis.

2) In the epoch of monopolism the absolute growth of newly created surplus value relatively exceeds the tempo of increased capital investments in production, with the consequence that the capitalist system possesses more disposable loan capital than in the epoch of free competition.

3) Because one of the unique features of the current world crisis is a lack of price increases during the period of expansion, it follows that the quantity of credit instruments, compared to the total volume of production, was relatively smaller than in the epoch of free competition. During the epoch of free competition inflation of commodity prices in the period of expansion inevitably caused the volume of credit in circulation to grow in a certain proportion not only to the growth of circulating values, but also to the overall price of the whole mass of commodities. With a curtailment of production, a glut in the commodity market, and a chase after cash for making payments, the shock in the sphere of credit was much stronger.

4) The world war caused an extraordinary increase of state indebtedness and consequently a growth of the number of fixed-interest securities. Thus there occurred a relative increase of the portion of loan capital which does not depend directly upon the course of the production process for its interest payments, but instead receives payment in large part from state budgets. This circumstance must inevitably moderate the credit crisis initially, insofar as the *entire* money market is concerned, but then the crisis will accelerate when the budgets of debtor countries reach the point of collapse.

5) The center of the world crisis lies in the United States, a country with an enormous stock of gold. Here the banknotes in circulation are well secured so that a decline in the circulation of checks means that the volume of circulating cash either corresponds to or only modestly exceeds the requirements of society.

How was the crisis in the United States transformed into a world crisis, and why was it inevitable that such should occur?

In theory the answer to this question is clear from what has been said already. If an economic expansion occurs in one part of the capitalist system, developing at the expense of another part, at one point or

another this expansion must also evoke a recovery of economic activity in the other part of the capitalist system. The reverse is also true: when the sources of economic expansion have been exhausted in the leading countries, the crisis will then strike with greatest force precisely in these countries, where it begins, and will subsequently pull down the entire world economy.

In fact, that is what has occurred. The economic expansion in the United States developed during the war at the expense of belligerent Europe and its lost foreign markets. The postwar industrial expansion in the United States consolidated the foreign trade positions that country had won during the war. Now this was accomplished in the face of European competition, including competition from countries with declining currencies who therefore dumped their exports. However, the industrial expansion in the United States could not fail to draw the countries producing material and food items into expanded reproduction. An increase of production in these countries at the same time meant an increase of their exports; and increased exports meant increased imports, primarily from the United States. These countries also increased both their imports from Europe and their exports to Europe. In other words, by drawing material-producing countries into more rapid expanded reproduction, the United States simultaneously expanded the capacity of their markets for Europe.

Meanwhile, United States trade with Europe likewise increased. The United States expanded its production demands and especially its consumer demands for European production.

The aggregate result was that the United States and its economic periphery attracted Europe into the economic expansion, although this does not mean that in Europe there were no other stimuli for industrial recovery. The whole process can be seen in the following tables, showing the distribution of American exports and imports by individual countries [see pp. 150-151].

The tables reveal the picture with complete clarity. The table of United States imports shows that the greatest increase of imports into the country came from the northern part of North America, rising from 337.6 million dollars in 1921 to 514.4 in 1929; from South America, rising in the same years from 295.6 million to 639.8; from Asia, rising from 617.9 to 1,280.3; and from Africa, rising from 40.4 million to 108.6 million.

Thus the greatest expansion of economic ties with the United States was experienced by countries who are the objects of American

Exports (including Reexports) and General
(in millions of dollars)

Year	North America northern	North America southern	South America	Europe	Asia	Oceania	Africa
1911	274.5	182.6	108.9	1,308.3	105.1	46.3	23.6
1912	333.9	182.9	132.3	1,341.7	141.2	48.2	24.0
1913	420.4	197.0	146.1	1,479.1	140.4	53.7	29.1
1914	350.6	178.1	124.5	1,486.5	140.8	56.3	27.9
1915	306.1	171.0	99.3	1,971.4	139.2	53.0	28.5
1916	613.4	311.1	220.3	3,813.3	387.7	82.8	54.0
1917	839.3	422.4	311.9	4,061.7	469.4	77.4	51.4
1918	900.2	425.2	302.7	3,858.7	498.5	104.5	59.2
1919	750.0	545.8	441.7	5,187.7	771.7	125.6	97.9
1920	984.8	944.3	623.9	4,466.1	871.6	171.6	165.7
1921	600.4	529.1	273.3	2,363.9	532.6	112.8	72.8
1922	583.5	332.2	226.1	2,083.4	449.0	101.9	55.8
1923	660.5	425.7	269.3	2,093.4	511.5	146.4	60.7
1924	633.9	456.1	314.3	2,445.3	514.6	156.5	70.3
1925	658.6	479.7	402.6	2,603.8	486.6	189.5	89.1
1926	747.7	428.8	443.5	2,310.1	564.5	212.7	101.3
1927	845.3	407.7	438.2	2,313.8	599.6	193.7	107.1
1928	924.2	397.2	480.8	2,374.9	654.5	180.0	116.7
1929	961.5	433.6	539.3	2,340.8	643.2	192.0	130.5

Source: [U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, *Statistical Abstract of the United States 1930*, 52nd number (Washington, D.C., U.S. Government Printing Office, 1930), p. 482.]
Editor's note: Preobrazhensky gave no source for this table. Errors and omissions in the data have been corrected.—R.B.D.

Imports of Merchandise Distributed By Continents
(in millions of dollars)

Year	North America northern	North America southern	South America	Europe	Asia	Oceania	Africa
1911	102.3	203.2	182.6	768.2	230.9	12.9	27.2
1912	110.1	223.9	215.1	819.6	248.7	13.2	22.6
1913	121.8	240.2	217.7	892.9	297.5	16.5	26.4
1914	162.0	265.4	222.7	895.6	305.1	24.0	19.1
1915	161.0	312.0	261.5	614.4	271.8	28.5	25.0
1916	240.2	418.3	427.6	633.3	550.9	59.5	61.9
1917	419.1	452.9	598.8	551.1	820.6	36.8	73.1
1918	457.7	517.0	610.9	318.1	939.3	102.7	85.5
1919	500.2	657.6	687.5	750.5	1,107.7	88.6	112.2
1920	[illegible]	1,048.0	761.0	1,227.8	1,396.7	80.0	150.3
1921	337.6	417.2	295.6	764.9	617.9	35.5	40.4
1922	366.5	455.9	358.8	991.2	826.9	48.5	64.9
1923	418.3	583.2	467.4	1,157.1	1,019.8	59.2	87.1
1924	402.0	593.1	466.1	1,096.1	930.7	48.9	73.0
1925	458.8	521.7	518.8	1,238.2	1,319.1	77.8	92.1
1926	485.5	526.1	568.0	1,285.9	1,400.7	68.4	96.4
1927	484.5	501.0	518.3	1,276.5	1,256.8	54.5	93.3
1928	500.0	460.7	569.4	1,248.7	1,168.9	53.5	90.2
1929	514.4	467.2	639.8	1,332.6	1,280.3	56.6	108.6

Source: U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, *Statistical Abstract of the United States 1930*, 52nd number (Washington, D.C., U.S. Government Printing Office, 1930), p. 483.
Editor's note: Errors and omissions in the table have been corrected.—R.B.D.

economic expansion. Economic expansion of the United States meant increased demand for the products of these countries, or a growth of their market in the United States.

As for United States trade with Europe, here too the tables indicate a certain growth, although much more slowly. Exports from the United States to Europe did not increase in value after 1921; and taking into account a certain decline of the price index, these exports even fell. On the other hand, exports from the European countries to the United States show a steady growth, even if it was not rapid. After 1921 Europe's exports to the United States increased from 764.9 million in 1921 to 1,332.6 million dollars in 1929.

At the same time as the period of economic expansion was underway on the other side of the ocean, Europe's exports to the material-producing countries grew slowly but steadily. Canada, for example, developed its imports during the five years before the crisis as follows.

Value of Imports into Canada of Merchandise Entered for Consumption, from the British Empire and from Foreign Countries, in the five fiscal years ended March 31, 1925–1929
(in millions of dollars)

Countries	1925	1926	1927	1928	1929
United States	509.8	608.6	687.0	718.9	868.0
United Kingdom	151.0	163.7	163.9	186.4	194.0
Europe	51.4	59.7	78.1	85.9	92.7

Source: Canada, Dominion Bureau of Statistics, General Statistics Branch, *The Canada Year Book 1930* (Ottawa: F. A. Acland, 1930), pp. 557–58.
Editor's note: Errors in the table have been corrected.—R.B.D.

The figures relating to Canadian imports are also characteristic for other countries of the same type on the other side of the ocean. These countries exported more to the United States and imported more from the United States than from any other country, although they simultaneously increased their economic ties with Europe. In this respect Germany's export distribution is indicative.

German Imports and Exports
(in millions of marks)

Year	Imports	Exports
1913	11,655	10,982
1925	13,652	9,964
1926	11,220	11,101
1927	15,839	11,746
1928	15,679	13,228
1929	14,027	14,215

Source: *Statistisches Jahrbuch für das Deutsche Reich* (ed. by Statistische Reichsamt), Vol. 49, 1930 (Berlin: Verlag von Reimar Hobbing, 1930), p. 190.

German Exports by Continents and Countries
(in millions of marks)

Continents	1927	1928	1929
Europe	7,978.6	8,987.8	9,924.1
Africa	256.9	280.3	311.9
Asia	826.1	923.1	1,041.8
America	1,646.9	1,757.1	2,093.2
—including			
United States	776.2	795.9	991.1

Source: *Statistisches Jahrbuch für das Deutsche Reich*, 1930, pp. 234–35.
Editor's note: Errors in the table have been corrected.—R.B.D.

Figures showing the direction of exports from England and France reveal much the same picture.

Once it began, the crisis was quickly echoed in United States foreign trade, which began to decline rapidly from month to month.

The year 1930 gives the following export and import figures for the United States [p. 154].

A reduction of imports into the United States means a contraction of the market for sales both for countries on the periphery of the United States and for Europe.

Exports (including Reexports) and General Imports of Merchandise by Months (in millions of dollars)

Months (1930)	Exports	Imports
January	410.8	311.0
February	348.9	281.7
March	369.6	300.5
April	331.7	307.8
May	320.0	284.7
June	294.7	250.3
July	266.8	220.6
August	297.8	218.4
September	312.2	226.4
October	326.9	247.4
November	289.0	203.6
December	274.9	208.6

Source: [U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, *Statistical Abstract of the United States 1931*, 53rd number (Washington, D.C., U.S. Government Printing Office, 1931), p. 486.

Editor's note: Preobrazhensky gave no source for this table, and the source he used has not been located. The data substituted here were published some months after his text was completed.—R.B.D.

On the other hand, the economic crisis in material-producing countries leads to a sharp curtailment of their exports and imports, including curtailed imports from Europe. The enormous curtailment of foreign trade on the part of the countries of South America, Australia, New Zealand, India, and so on, has been sufficiently documented in the economic literature and need not detain us here. We need only observe that in the majority of cases the abrupt and spasmodic reductions of trade in these countries only began to appear after the crisis took shape in the United States, a fact which demonstrates that these countries played a passive role in the crisis process. Despite the depressed condition of the most important types of industrial material, production was maintained in these countries at a high level, and their economic conjuncture only fell sharply with the beginning of the crisis in the United States. The dynamic of raw material prices shows that although cotton, leather, and especially wool began to fall in price even before the beginning of the crisis in the United States, the general crisis as such only began in these countries following its outbreak in the United States. The greatest disruptions of material prices took place between September and December 1929, that is, after the stock-exchange panic in the United States.

The entire picture, therefore, can be visualized this way. The center of expansion is the United States, which draws the material-producing countries along the path of recovery. This recovery carries over into Europe, which also begins to expand production, although at a much slower tempo. The change of conjuncture in the United States begins to occur by the moment of depression in 1927. On the other hand, the overproduction of material likewise makes itself felt before the beginning of the crisis in the United States. But the finale of the entire postwar expansion, the recovery in heavy industry and especially machine building, overlaps the beginnings of depression and postpones the crisis in the material-producing countries. At the same time Europe, having been drawn into recovery, continues to increase production right up to the crisis itself. The only exception is France, which we shall discuss separately. Comparative data for the conjuncture in the United States, Canada and the European countries can be seen in the following table, wherein the volume of production for 1928 is taken as 100.

Production Indexes
(1928 = 100)

Country	1929	1930	1930 Sept.	1930 Oct.	1930 Nov.	1930 Dec.	1931 January
France	109.4	110.2	107.9	107.1	106.3	105.5	104.7
United States	107.2	87.4	82.0	78.4	76.6	73.9	—
United Kingdom	106.0	97.9	94.2*	—	—	93.8†	—
Germany	101.8	84.4	78.4	77.1	75.6	73.3	70.9
Canada	111.6	94.9	89.4	90.3	90.0	79.7	—
Poland	99.8	82.2	84.4	85.0	82.0	79.0	73.9
Sweden	122.7	119.1	115.5	114.5	109.1	109.1	102.7

Source: [League of Nations, *Monthly Bulletin of Statistics*, Vol. XII (Geneva, February 1931), p. 55.]
*Third quarter.
†Fourth quarter.
Editor's note: The text gives a different and incorrect, source for this table. The data substituted here are similar to, but more complete than, the data given by Preobrazhensky and were probably published slightly later.—R.B.D.

The table indicates that the crisis is developing more or less evenly in the United States, Germany, and England. France is still only modestly affected by the crisis condition, although the change of conjuncture

there too began as early as mid-1930. In order better to illuminate the position of the French economy, we shall refer to figures characterizing the volume of that country's industrial production, beginning with 1925.

Indexes of Industrial Production in France
(1913 = 100)

Period: Monthly average and monthly	General index	Metal-working industries	Metal-lurgy	Extractive industries	Textile industries
1913	100	100	100	100	100
1925	108	115	101	104	91
1926	126	132	113	114	97
1927	110	114	112	117	98
1928	127	138	125	117	99
1929	139	157	129	123	92
1930	140	157	125	123	85
1931	124	136	104	110	71
1930 monthly					
April	144	161	129	124	87
May	144	161	132	121	96
June	143	162	128	119	87
July	141	161	124	121	82
August	139	159	125	121	80
September	137	155	120	120	80
October	136	152	120	120	84
November	135	149	119	121	86
December	134	146	119	119	85
January (1931)	133	144	117	119	83

Source: Statistique Générale de la France, *Annuaire Statistique*, Vol. 47 (Paris, 1931), p. 60.
Editor's note: The source cited in Preobrazhensky's text could not be verified. Later and more complete data have been substituted here.—R.B.D.

As far as France's foreign trade is concerned, it is falling with respect both to exports and imports, with exports falling more quickly. The index of wholesale prices is continuing to fall, although the decline is slower than the world price index, whereas before the beginning of the crisis the French price index was below the world index, a factor guaranteeing favorable conditions for French exports.[31]

Despite the enormous surplus of money capital in France, we are

witnessing a sharp curtailment of investment on the part of new capital. Investment has fallen dramatically within the country, while foreign investments are virtually unchanged by comparison with 1928. Showing the scale of issues as a percentage of 1926, the following table gives an impression of the movement of investments within France.

French Issues
(1926 = 100)

Year	Index	Year	Index
1926	100	1930 (Jan.)	164
1928	139	1930 (Dec.)	112
1929	197	1931 (Jan.)	77
1930	154	1931 (Feb.)	65

Editor's note: These are the data given in the text. Preobrazhensky gave no source for this table and the data could not be verified.—R.B.D.

From the table cited above we see that if we take the general index of industrial production, the turn towards crisis began in France in July, even though the conjuncture in individual branches turns out to be quite different. The textile industry began to reduce production as early as 1929. The whole of light industry, generally speaking, is now in a more depressed condition than heavy industry. In connection with the harvest failure on the one hand, and the catastrophic drop of world prices for agricultural products on the other, French agriculture likewise finds itself in a completely depressed condition, despite several measures of a protectionist character, taken by the government in order to defend agriculture against foreign imports.

At the same time the metal-working industry shows an enormous growth and a high conjuncture right up to August 1930, when the decline sets in.

This whole picture reminds us strikingly of the situation we saw in the United States before the crisis. In both countries light industry and agriculture display the signs of a declining conjuncture before the crisis, while a high level of activity is maintained in the metal-working industry, the main branch for manufacturing fixed capital, as well as in other heavy industrial branches, especially the metallurgical and coal industries.

Another extremely characteristic and interesting phenomenon,

noted in the economic literature, is the fact that France is presently increasing its imports of certain metal products from abroad. If the process is developing in France in the same manner as it did in the United States at the beginning of the crisis, this phenomenon is quite understandable. Apparently France is completing the process of reconstructing and expanding fixed capital, having no objection to importing discounted equipment from abroad for this purpose. If that is how matters really stand—and this position still requires further evidence—then the French economy, beginning perhaps in July of last year, finds itself in approximately the same conditions as the economy of the United States from June 1929 to the October stock-exchange crash. I do not mean to say that in France too there will occur something like the stock-exchange panic of October in the United States, still less that the fall of security prices, although more modest than in the United States, has already taken place during 1930. However, there is every reason to expect the imminent development of a crisis in French heavy industry, a crisis that will drag down as well the entire French economy and still further intensify the critical condition of the other European countries. At the present time it is not possible to predict whether this crisis will become as acute as the one in the United States. The one thing that is beyond doubt is that the exceptional position in which France now finds itself must quickly come to an end. France entered on the road of expansion later than the United States because up to 1927 it experienced a crisis in its monetary circulation, which seriously weakened the country in economic terms. But the preconditions giving rise to the industrial expansion in France, in general and on the whole, are of the same order as the preconditions and causes of the expansion in the United States. France not only availed itself of the purchasing power of its domestic market and the market of its colonies, it also developed at the expense of defeated Germany and Austria. In this sense its industrial expansion, to a certain degree, was connected with the outcome of the war. Every cycle of industrial expansion requires a certain period of time. And now the one-sided development of France, representing an exception in Europe, is coming to an end. The economic literature has already remarked upon the beginning of a depressed condition in light machine building. Furthest of all from the crisis, only heavy industry was developing more or less freely. But apparently it too is going through the final months before a crisis. From an island washed by the waves of world crisis, France might be converted just as much into its European source as Germany. One need hardly demonstrate that this

crisis will not only dramatically intensify the crisis position in Europe, but will also have an influence upon the entire world economy.

10. Prospects

There is currently no question of more vital importance than a prognosis of the world economic conjuncture for the near future. With the utmost attention the economic organs of all countries are following the stock-exchange bulletins and looking through a telescope at every price increase on the commodity exchange, hoping to divine the first signs of recovery. Up until this time, however, all of the many predictions of a turn in the conjuncture have turned out to be false. A slight recovery on the New York exchange, involving one type of commodity or another, is quickly registered by all commentators as an important symptom of change in the conjuncture. Then they swallow the pill when their prognosis fails, only in order to make the same prognosis again at some other bend of the curve. To search for a prognosis in the exchange bulletins is about the same as trying to guess the meaning of a mural by scrutinizing one centimeter of area at a time under a microscope.

Only by standing back from the present-day conjuncture and equipping oneself with a theoretical understanding of the economic cycle under imperialism; only by understanding both the general and the specific causes of the current world crisis as a crisis of the entire system; only in these ways is it possible to begin constructing a prognosis—the most dangerous of all tasks for authors and the most delicate part of a scientific investigation.

Today the difficulties of a prognosis are exceptionally great because the current cyclical crisis of capitalism is occurring within the context of another, more general crisis—the terminal crisis of the entire capitalist system, as such—which projects the strongest influence back upon the economic crisis proper. Just as it is impossible to study the current economic crisis merely as a pure economic process, so it is impossible to give a purely economic prognosis without taking into account the entire capitalist system and its condition as a whole. But to take the system as a whole means to give a general prognosis, not one that is exclusively economic.

Insofar as the epoch in which we live is one of social revolution, an epoch of a deeply transitional character that disrupts the laws of the "normal" course of events in capitalist society, no prognosis is possible by taking the established repetition of events and modifying it to include the various deviations resulting from accumulated changes at the given historical stage. What is now occurring is precisely the breaking up of established regularities; the specific laws of the transitional period are now entering upon the scene, meaning the laws of the capitalist system's disintegration and its forceful liquidation under the blows of proletarian insurrections and wars. Never was the situation so complex, so confused, so difficult for giving a prognosis. One must deal with a whole series of tendencies and countertendencies in completely unexpected and unprecedented combinations never before seen in the past. That is why a general political prognosis is so difficult in such an epoch, why it must reckon in months and years rather than in decades. And that is also why a general economic prognosis is so difficult, why it is particularly difficult—and from the viewpoint of investigative methodology wrong and even harmful—to separate economics from politics, and economic relations and processes from social-political relations and processes.

Capitalism is in the stage of destruction, and all its social relations are being shaken up by the world economic crisis. In each element of this economic crisis are elements of the general crisis of capitalism, elements of the long "cycle" running from the system's acute decay and rotting to its liquidation.

In the epoch of free competition the system most often found a way out of a capitalist crisis by turning to the renewal of fixed capital on the part of light industry.

If this factor is missing and no allowance is made for such exceptional circumstances as a revolution in technology—or in the case of a national economy, the opening of significant new markets and receipt of orders from abroad—then there remains only one possibility of finding a solution to the crisis; that is, the depletion of inventories in the case of consumer articles[32] and curtailment of production of means of production below the level of demand, particularly the curtailment of production of fixed capital below its annual rate of amortization throughout the entire economy.

These are the natural limits to the decline of production and consequently the threshold beyond which recovery might begin—provided the system is not liquidated. Otherwise recovery might begin in those

parts of the system not yet liquidated by proletarian revolutions.

There is a possibility of recovery beginning because the quest for profit, although it provides less stimulus under imperialism for expanding production and fewer results in the area of utilizing new productive forces, nevertheless does continue to operate, albeit with considerably less effect.

Turning to the world economy, above all the United States, the breeding ground of the crisis, we see that here the expansion and renewal of fixed capital already occurred in the final stage of the expansion. As a result of change in the character of the cycle, monopolism loses the mechanism for overcoming a crisis which existed in the epoch of free competition. This proposition also applies to the present crisis, and United States capitalism cannot count upon finding a way out of the crisis in this direction. Similarly there has not occurred any kind of technological revolution, which could lead to moral wear of a significant mass of capital and therefore to large orders for new fixed capital. There is also no hope of expanding foreign markets in new territories. We must expect, therefore, that United States capitalism will endure a grave and prolonged contraction of the production apparatus until it reaches the limit we mentioned above. Branches in Department II must contract sufficiently to adjust to the new proportions of consumption and to absorb the inventories already in existence. The branches manufacturing fixed capital might contract as far as the level of annual amortization for fixed capital.

The question that arises is the following: what degree of physical contraction of production is required from the economy of the United States? How far must contraction of the production apparatus proceed in order to reach the limit imposed by the crisis and to run down commodity inventories left over from the period of expansion?

No question is more difficult to answer than this one, both in view of the inadequacy of much of the statistical data and because of the intervention of a variety of secondary factors, all pulling in different directions. Looking at the prospects in general terms, however, one can set forth the following hypothesis. The volume of production in the United States must contract, at the very least, to the level existing before the recent expansion, or approximately to the level of 1922–1923. At that point there must occur a further contraction of a conjunctural character, whose purpose is to run down excessive commodity inventories. Looking at the index of industrial production for the United States over the past decade, and comparing it to the monthly production data for 1930,

we see that the fundamental contraction of production was virtually complete by the end of the second half of 1930 and that December gives a level of production lower than any for the past nine years. It is reasonable to think that at the present moment the economy of the United States is undergoing the supplementary contraction needed to absorb redundant commodity inventories. It is therefore unlikely that production in the United States will fall significantly below its present level. An improvement of the conjuncture cannot be expected this year, however, for 1931 and 1932 will be the years of supplementary contraction. That does not mean individual branches will not experience a certain temporary recovery; it does mean such a recovery will not alter the conjuncture as a whole. By all indications the most interesting year, from the viewpoint of overcoming the crisis, will be 1932. It is precisely next year, in 1932, and even more so in 1933, that the question must be fully clarified as to whether the capitalist system has in fact lost the mechanism for overcoming a crisis which was characteristic of the epoch of free competition, and whether it possesses any additional reserves whatever in this respect.

With respect to this question the following observations should be made. We have seen that during the epoch of free competition the transition from crisis to depression occurred as a result of the process of reequipping, which began in the strongest and most viable enterprises. Given the present state of the economic conjuncture in the United States, there is no economic basis for such large orders of fixed capital. Insofar as the economy of the United States is compelled to adjust to reduced prices on the world market, however, it will also be required to undertake a number of measures intended to reduce costs of production. At the moment it is difficult to say just what this postcrisis rationalization will include. Above all it will entail great pressure on the working class and reduction of the wage level, which is already occurring in a wide context. Second, one must expect liquidation of a large number of medium enterprises—either those functioning outside of trustified associations or even those that have operated within the trusts. In the third place, United States industry will apparently emphasize even more standardization and mass production, these being the methods of cost reduction that thus far have placed American industry in exceptionally favorable circumstances by comparison with European, and particularly English industry. Fourth, and finally, the possibility cannot be ruled out that this adjustment to reduced prices will also lead in some cases to a certain renovation of equipment in those

branches and enterprises where this process was not completed in the period of supplementary industrial expansion, or in cases where it was not immediately necessary at a time when the price index exceeded the prewar level by as much as 40–50%.

Finally, mention must be made here of one other rather essential reserve which might be used by United States industry, and that is the possibility of taking a number of markets from Europe, principally from England. At the present time the price level in England is causing a number of branches of English industry to be noncompetitive in the world market. Because England is already incapable of undertaking widespread industrial rationalization, the recent reduction of the world price index might clear a path for the United states into several markets which previously absorbed English production. At the present moment France too finds itself in analogous circumstances: measured in gold its price index is above the world level, whereas only recently, especially during the period of inflation in 1926, it was significantly below the world index. The longer the moment of crisis and a general rupture of the conjuncture is delayed in France, the more will France lose its foreign markets to those of its competitors who are able to adjust to the new, lower level of world prices. The very sharp contraction of French exports during recent months is due to two causes. On the one hand it is caused by the crisis and its general contraction of imports on the part of purchasing countries, who are generally reducing the volume of their foreign trade. But on the other hand the contraction has a further cause, one posing a much greater danger to French capitalism—namely, the loss of some French markets to other countries. French capitalism is beginning to lose markets even within France itself. This phenomenon can be seen in the fact that French exports are being curtailed much more rapidly than imports, while in the case of several commodities France is increasing its imports of cheaper German production.

The result of all these processes is that countries who are able to adjust to the lower price level will find themselves in a better position by comparison with countries such as England, which is experiencing rapid decline. The United States enjoys every prospect of preserving its superiority and leading economic role in the entire world economy, even though its general level of production will decline substantially and the process of transition from crisis to depression will be unusually slow, long, and agonizing.

In our economic literature it has frequently been pointed out that the present crisis will end in an unusually long depression, with no

prospect of a speedy new expansion. Basically this prognosis is quite correct, and it seems to me that in the present work I have introduced several *new arguments* to show why that is so.

On the territory of Europe, as we observed earlier, we have in France a country that has enormous weight in the European economy and has yet to enter into a period of real crisis. If one speaks in terms of a stock-exchange crisis, during 1930 France twice experienced a fall of security values, although the extent of the fall was far from proportional to the American case. The depressed condition of the French economy is indicated by a number of factors: by the volume of industrial production, especially in light industry but also in heavy industry, which entered the depression later; by the level of activity in agriculture; by reduced shipments on the railroads; and by the continuing decline of the wholesale price index along with several other indicators. Until now, however, the inevitable has not occurred: the condition of depression has not become one of crisis. The crash has occurred already in several French colonies, but within France the process is similar to what occurred in the United States. There is every reason to think that the high conjuncture, which was maintained in heavy industry and particularly in machine building, has delayed the onset of a general crisis. Perhaps it will not occur in accordance with the same schedule as in the United States, but during the coming months, and in any case within a year, a crisis must inevitably break out in these leading branches of the national economy. Then the whole of Europe will experience a new intensification and deepening of the crisis, this time under the blows of a crisis in France rather than in America. It is enough to consider the figures for French trade with Europe—which remains substantial despite the great capacity of the French domestic market—in order to see that the approaching crisis in France will seriously damage several European countries and cause further deterioration of their economic conjuncture.

Bourgeois economists in Europe are expressing the view that only the United States can lead the world economy out of crisis. In the foregoing analysis we have seen that the United States really was in a position to drag postwar Europe onto the path toward a certain recovery, just as it was also in a position to knock it backward into a condition of crisis. After that experience it appears natural that only the same United States is able to bring about a reversal of the world economic conjuncture, once its own economy enters the path of recovery. But all such hopes all ill-founded in this respect: *if the United*

States developed thus far at the expense of another part of the capitalist entity, it follows that it will similarly emerge from the crisis at the expense of the rest of capitalism. Although this process might assume diverse forms, it is just as completely inevitable as its final result; namely, accelerated decay of capitalism in several countries that cannot compete with the United States in rationalizing production and will emerge from the crisis with an even smaller quota of world trade.

In the case of Europe one cannot rule out the possibility that as a result of the delayed crisis in France and the higher prices for French production, Germany might derive considerable advantage from the curtailment of French foreign trade. To this consideration one must add the fact that Germany has every possibility of satisfying an even higher percentage of Soviet demand on the world market.

Economic prognoses are difficult to make unless they are at the same time coordinated with political prognoses. If we are to some extent making separate economic prognoses, we do so mainly in the interest of simplifying the exposition and because an economic prognosis, however provisional and incomplete, is easier to provide than a general social prognosis. In reality it is difficult to imagine that the present crisis will not have the same profound political consequences as are already breaking out in the economic realm and will continue to break out with terrifying force tomorrow, bringing with them the greatest devastation. In the first place we have in mind here the economic battles of the working class to preserve its former living standard; and in the second place we must consider the possible onset of a directly revolutionary situation in those countries where capitalism's position is most hopeless.

If we consider the figures pertaining to the level of English production after the war, it will be clear to all just how deep is the slump of the overall curve. Nevertheless, a slow but real expansion comes in the year 1926. One of the unique characteristics of England's position is the fact that here the economic crisis will lead above all else to enormous intensification of the social struggle. The reduction of wholesale prices is not being accompanied either by a proportional reduction or even by any significant reduction at all of retail prices, whereas a reduction of their selling prices is directly reflected in the balance sheets of enterprises and forces them to absorb colossal losses. The first reaction of capital, therefore, is an effort to reduce wages. A reduction of coal prices drives the coal industrialists to reduce further the already low wages of the miners. Although the recent strike in this branch was

settled by way of compromise, the problem remains to be solved and the possibility of a general strike by the miners hangs as a constant threat over England. Falling profitability on England's railroads provoked the entrepreneurs into lowering the wage fund of the railroad workers by several million pounds—and the railroad workers number more than half a million men in their ranks. In the textile industry the situation is just as tense: a stubborn and victorious strike has already been launched by weavers in the woolen industry; and things are just as strained in the machine-building and chemical industries. In the event of a new 1926 the English economy will be hurled downwards from its present level, which in turn is already substantially below even the crisis year of 1924.[33]

But enormous social clashes are more inevitable in Germany than anywhere else, for here the enormous army of unemployed and discarded workers is ever increasing and must reach 4–8 million during the winter of 1931. The general state of affairs is such as to create a directly revolutionary situation at any moment, bringing with it the possibility of snapping this link of the capitalist chain.

If the crisis breaks out in France, if there appear millions of unemployed and the entrepreneurs begin an assault upon the current wage level, then there too one can anticipate enormous shocks whose initial consequence will be to effect a further reduction of industrial production.

Enormous defensive mass strikes are also possible in the United States, although here wages are easier to lower than in Europe because they were once the highest in the world.

The grandiose conflicts that are now impending must shake up the capitalist system even further at a time when the system has already been seriously impaired under the pressure of the general crisis. The universal economic crisis of monopolism threatens to become a (general) crisis of the entire capitalist system. As in 1917 the capitalist chain will be broken at the link that turns out to be weakest and where the subjective forces of proletarian revolution are most mature and organized.

Speaking of the prognosis for the world economy, one must not forget the role played therein by the Soviet Union. As exporters we are suffering severely from the world crisis. And because of the thousand obstacles placed in our way by the capitalist countries in the matter of granting credits, etc., we are gaining much less as importers than we lose as exporters. For us a curtailment of exports means curtailed

imports. We can only cover the passivity of our trade balance either by exporting the gold we produce or by receiving long-term credits. As exporters we cannot count upon any quick or significant change of the conjuncture: a rapid industrial recovery in the entire world economy can be generally ruled out, and the same is true of any increase of demand or of prices for the objects we export. Our share of world trade is too small to permit us to exercise any influence upon the capitalist system from this direction. But we do influence it in another respect. Our economic system provides a model of what the socialist organization of labor can achieve. During these years of most severe economic crisis, overproduction, and unemployment in the capitalist world, we are registering exceptionally rapid tempos of development and experiencing acute shortages of both means of production and labor power. We are undermining the capitalist system by the very fact of our existence and our development. To use the well-known expression of Marx, we are showing the capitalist countries "a picture of their own future."

The current world crisis has already lasted more than two years. If we take a glance at previous crises of the capitalist system, we shall see that on average the condition of crisis rarely lasted more than one and a half years. This comparison of the current crisis with its predecessors is interesting in several respects. But in this connection we must emphasize that attempts must not be made to go too far in our prognoses by way of analogies with the past, for two very different processes are being compared. On the basis of an analogy with the past, and particularly through a comparison with the crisis of 1907, which also began on the territory of the United States, we would have to expect an improvement of the conjuncture approximately a year after the turn in the direction of crisis. After two years we would expect a new industrial expansion to be in full swing. Taking the turning point of the conjuncture to be the month of July 1929, it turns out that the present crisis is already more than a year longer than that of 1907–1908. And that is not to mention the fact that we not only have no signs of serious improvement, but instead symptoms of further deterioration. To these we must also add the deterioration which might be caused by the impending crisis in France. All the available data suggest that the coming years, and in any case the next 2–3 years, will be ones of intensifying crisis, or in the very best of cases years of deep depression.

Among other prognoses enormous significance must be given to the question of what influence this circumstance will have upon the approach of a new world war. At the present time the leading circles of all

the capitalist countries, and all the capitalists in general, live in the hope of an early reversal of the conjuncture. From past experience they know that crises repeat themselves periodically and that a crisis is followed by a recovery. Although the present world crisis did not lead to war at its very outset, we still have no guarantee against the possibility of war in its next stage of development, a war which will be directed primarily against the USSR. Just now the capitalist circles are expecting a new expansion which will provide them with a way out of the presently intolerable state of affairs. But our prognosis suggests that all of these capitalist hopes are nothing more than the self-consolation of bankrupts. There will be no expansion in the near future. And insofar as there will be no such expansion, there is every reason to fear that the capitalist classes of the different countries of the world, driven along with their system into a protracted economic impasse, will look to military adventures for escape. There are considerable grounds for thinking, therefore, that after one or two years, depending upon how long the present conditions of crisis last, the danger of a new world war will be considerably greater than it is now—especially a war against the USSR. The slogan might eventually prevail in capitalist circles: "better a critical ending than an endless crisis."

PART SIX

11. The Social Foundations of Fascism

The course of events in Germany, which is threatened with a fascist dictatorship, raises with particular immediacy the question of a correct theoretical analysis of the roots of fascism. This question must be addressed in all its aspects. A theoretically correct interpretation of the roots of fascism, making use of a number of new facts, is urgently necessary for our political practice, that is, for arriving at correct prognoses of our political struggle and for drawing the corresponding tactical conclusions.

When fascism first appeared on the historical scene it seemed to many to be one of the forms of capital's self-defense against the developing proletarian revolution. The historical course of events over the past half decade has demonstrated, however, that such a viewpoint is incorrect: it looked upon fascism as a much more superficial and transitory phenomenon in bourgeois society than has proven to be the case. Today there is every reason to suggest that fascism is not simply one of the forms of mobilizing bourgeois forces in the struggle against the proletariat, but rather a universal tendency of the capitalist system to replace the bourgeois-democratic form of state, whose development was completed at the end of the nineteenth century, with a fascist form of state. Our task will be twofold: to demonstrate that fascism is the form of the bourgeois state in the period of monopolistic capitalism, the final stage of capitalism's existence; and to show how the fascist form of state inevitably cuts a path for itself once development of the productive forces in bourgeois society comes to a halt.

First let us say a few words concerning the social character of bourgeois democracy. Bourgeois democracy is the form of state that

exists when the capitalist class is able to dominate the working class while still permitting universal suffrage in elections to parliament, relative freedom of the press and association, freedom to form unions, and even considerable freedom to strike. As a general rule such a political system is established in the epoch of classical capitalism, which includes free competition, rapid technological progress, and relatively great elasticity on the part of the economic system in terms of its ability to pass from one cycle of expanded reproduction to another. In the immediate aftermath of the bourgeois revolution the bourgeoisie finds it is still too weak to allow a democratic regime. In its struggle with the proletariat and the declining petite bourgeoisie, given the existing level of development on the part of the productive forces, the bourgeois class still requires assistance from surviving elements of feudalism in the form of a constitutional monarchy, with its military-political organization. More generally, the bourgeoisie requires assistance in the form of a class alliance with the bureaucracy and the landlords against the proletarians of town and country. This period holds a certain interest for us today precisely because it was one in which the bourgeoisie, relying upon its own economic forces, was unable to acquire dominance over labor and was obliged to enhance its strength to some extent through compromising with classes representing another system of exploitation. It needed a system of elections based upon property qualifications and frequently depended upon the naked force of state power in its economic struggle against the proletariat. In general and on the whole all of these facts demonstrated the weakness of the bourgeoisie, which had yet to succeed in subordinating the whole of society to the bourgeois system of domination.

During the period of capitalism's flowering, on the other hand, the period of free competition and rapid technological progress, the economic might of the bourgeoisie so increased, all the social relations were so restructured in a bourgeois pattern, and the market system of regulating economic processes became so forceful, that the capitalist class was able to assure itself the necessary level of exploitation and capitalist labor discipline without resorting to constant state intervention in the production process for the defense of capital, the sole exception being periods of particularly acute class struggle. Although the bourgeoisie granted juridical recognition of the right to strike, this right was never fully realized in practice and essentially represented formal recognition of the preponderance of bourgeois forces over the proletariat in the economic struggle. For the capitalist class it was

enough to have ownership of the means of production, protected by the bourgeois state. Private ownership, the lash of hunger (which drove the worker into the factory and kept him at his post), the industrial reserve army, and the whole system of freely purchasing and selling labor power—all of these factors together were enough to guarantee the bourgeoisie the necessary volume of surplus value. When the working class put on pressure in the economic struggle, the capitalists possessed sufficient reserves not only to exert economic pressure upon the proletariat, but also to grant concessions: uninterrupted technological progress and an expanding market led to a continuous increase of relative surplus value. Moreover, exploitation of the colonies provided capital with additional resources for raising wages without damaging the tempo of accumulation. The theory and practice of Manchesterism represented, in general terms, a program of struggle against the feudal remnants in society and a system of social policy on the part of the victorious bourgeoisie. At the same time it was a product of bourgeois self-confidence and expressed arrogant awareness of bourgeois strength and proletarian weakness in the economic and political struggle.

As far as the political realm is concerned, although the bourgeoisie implemented democratization of the state system under pressure from the proletarian and petit-bourgeois popular masses, and not on its own initiative, nevertheless its flexibility in this regard was likewise more an indication of strength than of weakness. The bourgeoisie was so strong economically and socially that it was able to resort to democratization without risking anything essential in terms either of economics or of politics. The classical works of Lenin on the subject of bourgeois and proletarian democracy brilliantly disclose this entire mechanism of bourgeois domination over hired labor through the state system of bourgeois democracy.

In general terms one could give the following brief formulation of this period: the period of bourgeois democracy in politics was the counterpart of the period of classical capitalism, free competition, and extensive operation of the law of value in the economy. Bourgeois democracy could only exist insofar as the level of exploitation necessary to capital was guaranteed, despite the relative freedom of economic struggle permitted by this form of state.

When we come to an analysis of the social form of fascism it is absolutely imperative to bear in mind everything that we have just said. If fascism really is not a transitory phenomenon, but a new form of

bourgeois state, then in order to understand its nature we must penetrate beyond the surface of political facts and relations to the very foundations of the production relations of capitalism. A new form of bourgeois state cannot arise and replace the old form, which has behind it a considerable history, unless such a change is demanded by altered relations in the basic social nexus of capitalism—that is, in the sphere of capital's dominion over labor in the process of production and distribution.

From a transitory phenomenon fascism is being converted into a new form of state, and this is happening precisely at a time when capital is unable to dominate labor and guarantee the level of exploitation it requires by relying upon the former methods of classical capitalism and those of the first stage of imperialism. These old, "classical" methods of capital's domination over labor have proven to be inadequate because monopolistic capitalism, in the period when the entire bourgeois system is declining and decaying, encounters completely new obstacles in the way of expanded reproduction. Exerting pressure upon the entire structure of capital as it takes shape in the period of developed monopolism, these obstacles turn out to be insurmountable for the capitalist system. They can only be temporarily pushed aside by employing completely extraordinary pressure against the working class. This pressure has one purpose: it must raise the norms of exploitation imposed upon the proletariat and lower its standard of living. Living standards must fall not only in relative terms, but also below the absolute level achieved to date, and for this purpose it is first of all necessary to crush all organized forces of proletarian resistance.

Without dwelling upon the matter, I wish only to repeat and comment upon the most essential facts concerning the obstacles to expanded capitalist reproduction. The productive forces of capitalism have reached such a level of development, and the concentration of production has advanced so far, that any further development of the productive forces encounters an insurmountable barrier in the monopolistic structure. During the epoch of free competition the capitalist system was far more elastic. Under the pressure of free competition capitalist enterprises were obliged to reduce prices in case of a sales crisis and thereby to guarantee the possibility of overcoming the crisis with the least curtailment of the production apparatus. In cases of profound crisis the lower prices smothered backward enterprises, but the strongest introduced new technological equipment and through this renovation of fixed capital prepared the preconditions for a solution to the crisis and

the beginning of a new expansion. Governed by the very same pursuit of profit, monopolistic enterprises in the period of imperialism follow the path of least resistance. They respond to a sales crisis not by lowering prices, but by curtailing production. The consequence is that the monopolistic form of organizing production blocks development of society's productive forces and creates exceptional new difficulties for the process of expanded reproduction. The uneven development of capitalism both on the scale of the world economy and within individual countries, or between the "thriving" branches of production and those that are "decaying and old," becomes acute. And the prolonged existence of monopolies creates such an accumulation of obstacles to expanded reproduction that any opening of the sluice-gates of the productive forces requires new methods of concentrating and distributing accumulated capital, both within national economies and over the world economy as a whole—methods that are utterly unknown to capitalism and completely incompatible with it. The very pattern of capitalist organization of the enterprise, as the basic economic cell of the system, has outlived its time—just as the existing system of distributing new accumulation by way of the capital market has become antiquated. Because it is not subordinated to the task of producing for the sake of consumption, this archaic method of distributing new investments represents a second factor causing the productive forces of the entire world to crash into the whole structure and operational mechanism of the capitalist system.

The carrying capacity of the capitalist system is so small with respect to the productive forces, and the need to push these through the Dardanelles of the average norm of profit and the other structural barriers—which capitalist monopolism has raised to the third power—has become so acute, that such a state of affairs leads throughout the world economy to a systematically growing, organic, and absolute immobilization of an ever-increasing portion of both capital and labor power; that is to say, to an increase of fixed capital which is not utilized, to idle resources of material, and to absolute unemployment. The capitalistic economic structure, the monopolistic form of labor organization, and the system of exchange—all of these have become child's clothing worn by an adult. The adult body is artificially squeezed into this costume, which can only be torn apart and retailored in socialist fashion by the proletarian revolution, as was done in the USSR. To the extent that the proletarian revolution is forestalled, capitalism either reduces its body size through the bloody surgical operations of imperialist war—as it did

in 1914–1919 and as it threatens to do again in a new war—or else, in a period of "peace" and merciless competitive struggles for their "quota" of world trade, the capitalist countries begin to rely upon the most primitive of all methods for reducing costs—reduction of the share of the wage fund in society's income. Capitalism does this in its period of decay, when the narrow carrying capacity for expanded reproduction, resulting from the entire structure of monopolistic capitalism, makes it impossible to achieve complete utilization of all the means of production and all of society's labor power. *Utilization of all the available productive forces could provide capitalism with ten times more surplus value than it is in a position to extort by lowering the existing wage level and employing a reduced volume of labor power.* Such a utilization of the available productive forces conflicts with the pursuit of immediate profit. It would involve enormous capital investments in such backward branches, for example, as the English coal industry, together with the most rapid possible industrialization of the colonies and abandonment of the system of maintaining high prices in a period of crisis—in other words, abandonment of everything resulting from the entrepreneurial spirit and the existing basic regulator in the allocation of new capital.

But if this road is closed to contemporary capitalism, with its curtailment of free competition and its distorted operation of the law of value as the regulator of production; and if the mechanism of contemporary capitalism cannot cope with the powerful productive forces it has itself created, *then it is with all the more persistence that it strains to follow the path of least resistance and to compensate for its weakened economic power, on a narrowed basis of social production, by doubling its apparatus of political power and its political pressure on the proletariat.* This course of action becomes all the more possible from an organizational-political viewpoint because monopolistic capitalism brings extraordinary reinforcement of the tie that binds the trusts and other capitalist organizations to the bourgeois state; it concentrates the instruments of economic, political, and cultural pressure upon the proletariat and the whole of society in the hands of a small group of exploiters at the summit, who in turn subordinate to themselves the bureaucracy of the reformist trade unions along with the so-called socialist parties.

This process, which began to appear with the development of capitalism's monopolistic tendencies, was unusually reinforced after the war and reached its finished form in fascization of the state appara-

tus and fascization of the trade unions. The trade unions were converted from instruments of proletarian economic struggle, or at least instruments for the organized sale of labor power on the labor market, into organs for the direct suppression of proletarian resistance and functioning organs of capital, their immediate purpose becoming one of raising the rate of exploitation. Manchesterism in the area of economic relations between labor and capital, and bourgeois democracy in the sphere of politics—these two phenomena disappear simultaneously. They do so precisely because present-day monopolistic capitalism is the capitalism of decline and decay, the capitalism of a growing immobilization of the means of production, which can no longer dominate labor and raise the norm of exploitation without resorting to a doubly reinforced state apparatus of repression and multiplication of the means of exerting noneconomic pressure on the working class. The number of workers employed in production is declining. The unproductive consumption of the bourgeois system is growing. Pressure upon those workers who remain employed in production becomes all the more necessary for capital in order to adjust the norm of their exploitation to the needs of the capitalist system of distribution. In this respect one can both assert and prove, drawing upon a wealth of material over recent years from several capitalist countries, that the tendency towards fascization of the state apparatus and replacement of bourgeois democracy with fascist dictatorship—or the tendency for democracy to degenerate into fascism—is a universal tendency of monopolistic capitalism in our day. The deep roots of this tendency are found not so much in the organizational-political influence of monopolistic capitalism upon contemporary society, as in the blocked development of the productive forces and curtailed capacity for expanded reproduction, which results from the *economic* structure of monopolistic capitalism. Even though the state system of monopolistic capitalism and its entire apparatus of organizational-political and cultural pressure upon society have the obvious effect of accelerating this process, the basic cause lies precisely in economics. In any other case it would be difficult to explain why fascism did not triumph as soon as the epoch of completely free competition came to an end.

But this common tendency of contemporary capitalism, toward a fascist form of state and fascist methods of dominating labor, forces its way along different paths and with differing degrees of strength in individual capitalist countries. The whole process develops most rapidly and decisively in those countries where the big bourgeoisie, for

economic reasons already mentioned, is compelled sooner than elsewhere to increase its pressure upon the proletariat using the concentrated might of its entire political apparatus of oppression. More gradual fascist tendencies are emerging in those capitalist countries who find themselves in a stage of greater "prosperity" and possess some form of supplementary reserves, enabling them to continue maneuvering for a certain time without resorting to scrapping the old form of state.

Beginning with these general propositions we are not only able to explain a great number of facts pertaining to fascism in individual countries, but we can also provide certain essential prognoses.

The main capitalist countries of the world can be divided into three groups in terms of the strength and maturity of tendencies towards fascization: 1) countries where a fascist regime is already established, such as Italy; 2) countries which are traveling the road of fascization but where the process has yet to be completed, such as Germany; 3) and finally, countries where the elements of fascism are maturing but still have not come sufficiently to light. Philistine public opinion considers these countries to be "pillars" of democracy, safe from fascism. If one goes beyond the main capitalist countries and looks further, another group of countries would also have to be included, whose regime is a surrogate fascist regime, and then there are also countries of what might be called pseudo-fascism.

Italy belongs to the first group of countries. Regardless of how fascism came to power here—and that is a very important, although highly specialized question—it survived and grew in strength mainly because Italian heavy industry found itself in exceptionally unfavorable circumstances. Deprived of its own iron ore and coal, it was compelled to overcome the consequent increase of production costs by suppressing the proletariat's standard of living. In order to defend its "quota" of world trade the big bourgeoisie—which was not defeated in the movement of 1920 because of the weakness of the proletariat and its Communist Party—was compelled to reconstruct relations between labor and capital sooner than in other countries in order to deprive the proletariat of its means of defense, to subordinate the workers to the entire apparatus of force, and thus to lower production costs primarily by reducing wages. The best illustration of this contention is the movement of wages for Italian workers from 1922 to the present. Dramatic and forcibly imposed wage cuts make it possible for large-scale Italian industry to hang on to at least some of the markets it acquired in days more suitable for capitalist development. In some cases the Italian

bourgeoisie was even able to expand production and exports beyond the prewar level. The historical mission of the fascist form of state in Italy was precisely to assist the Italian bourgeoisie, by reconstructing the state apparatus and disarming the proletariat, to keep its balance in the area of production costs and relations with the world market. The fact that Mussolini's fascist forces were not in the beginning an organization created by large-scale capital is of no consequence. Social necessity clears for itself a path through capitalist society in the most whimsical manner, and in the present context we are not concerned either with the way the fascist forces came to power or from whom they were recruited. Our intention is to explain another fact; that is, why they remained in power, why these new cadres were better able to express the new requirements of capitalism, and why they adopted the type of state necessary to large-scale capital in the country we are considering.

It is true that fascism has still another task: it must ideologically and organizationally unify the country for a new world war. But the need for fascism's appearance and the inevitability of a new imperialist world war are both explained by one and the same cause.

As far as Germany is concerned, it finds itself in a much better position than Italy with respect to coal and steel, although with the loss of Alsace-Lorraine its position deteriorated seriously. Germany is a much more industrialized country than Italy, with a much more advanced technology, much better industrial organization, and much more stable positions in the world market. These are Germany's reserves, and they enabled its capitalists to manage with a much slower and less dramatic reduction of wages. Even the most recent wage reduction in a number of branches of German industry was achieved without a fascist revolution in the system of state management or in the direct relations between labor and capital (although there has been a fascization of Social Democracy, which still controls most of the workers' professional organizations). However, in another specific sense the conditions are not favorable for German capitalism's existence. In the first place Germany must pay out reparations in the amount of 1,700 million marks annually. Every literate economist understands what this sum of payments, imposed upon a capitalist country from the outside, implies for the equilibrium of its economic system. Secondly, Germany must pay out more than a billion marks in interest on borrowed capital and income earned by other foreign investments in Germany. Before the war Germany's own foreign capital investments exceeded foreigners' investments in the German economy

by 20 billion marks, thus guaranteeing an inflow of additional surplus value from abroad and correspondingly influencing its tempo of accumulation and level of wages. Now foreign investments in Germany exceed Germany's foreign investments by approximately 17 billion marks.[34] The result is a flow of surplus value abroad amounting to more than a billion. According to rough calculations by German economists, the country needs a trade surplus of exports over imports in the amount of 2.5 billion marks in order to balance its international payments. Such an unfavorable position for Germany, in terms of the relation between its own and foreign capital in German industry, came about partly because in the period of inflation Germany "sold off" an enormous portion of its circulating capital for a song and then was obliged to reconstruct it by reliance upon short-term loans. So long as the inflow of loans exceeded the outflow of interest payments abroad, Germany's balance of payments was much more favorable. Today, in contrast, the situation has deteriorated sharply: the inflow of capital is declining and the capitalists face the task of reducing their own indebtedness at a time when the interest being paid out continues to grow. The position has become all the more serious because of the world crisis, which causes the conditions of realization to deteriorate for all exporting countries, but especially for those who must reach a certain level of exports no matter what happens or what the conjuncture might be.

Hence we see the particularly strenuous efforts of the German bour geoisie in recent times to reduce the wages of workers and employees, to trim every part of the state budget representing expenditures on services for the masses of the people, and to increase taxes on wages while reducing taxation of landlords and capitalists—in a word, the whole system of measures adopted by the Brüning government, which can be taken as representing the first step towards implementation of a fascist economic policy. The German bourgeoisie is attempting to restore a certain equilibrium to the country's economic life on a capitalist basis. It is assuming the task of guaranteeing for itself over the long run a fascist norm of labor exploitation, making a break with the former living standard of the workers, securing a certain level of accumulation for the bourgeoisie, and implementing a fascist budget—with no regard to the question of what portion of Germany's labor power and fixed capital will end up being immobilized. Pursuit of this objective is already under way in Germany and follows two basic paths.

The first path is reconstruction of the relations between labor and capital with the support of Social Democracy, which itself in this case

becomes an apparatus for implementing the fascist revolution. We use the word "revolution" here because what is involved is a most serious change in the essential relations between labor and capital, whether or not it is accompanied by gunfire. In the case where there is no gunfire Social Democracy will restrain Hitler's organization and preserve the remnants of parliamentary institutions along with the appearance of workers' trade-union associations, while fulfilling the fascist economic program of the bourgeoisie. Perhaps it will do so with support from a certain section of the bourgeoisie, which for international and other reasons prefers fascization by more evolutionary methods. As a reward for fulfilling this program Social Democracy will preserve some kind of democratic etiquette within the country—and what is most important, *it will preserve its own apparatus* in the service of the bourgeoisie.

The second path by which the German bourgeoisie might establish equilibrium in the country's economic life entails a more rapid and decisive enactment of its program. In this case the apparatus of enactment will be the Hitlerite organizations, which will be converted into the main cadres of the fascist state, which in turn will put into effect the program of the German big bourgeoisie in accordance with the classical Italian model. Naturally this whole flow of events might change fundamentally if all this struggle within the bourgeois camp should create the possibility of victorious intervention by the proletariat, as a third force, under the leadership of the Communist Party. But whatever the case, whether the fascist revolution in the relation between labor and capital is carried out by special fascist cadres or through the fascization of Social Democracy, which will then put an end to democracy in the future—whatever happens the process itself, having already taken hold of this country, will not essentially change.

With regard to the countries that are still somewhat more immune to fascism such as France, England, and the United States, their safety is explained by the fact that in these countries capitalism still enjoys more favorable economic conditions: the capitalist classes of these countries have not yet been forced to establish openly fascist labor discipline or a fascist level of wages. The resources of American capitalism, relying upon the most advanced technology in the world, the most powerful industry, the most extensive domestic market, and the greatest proceeds from foreign investments—these resources are familiar enough. Even without a change of the state system, however, these resources have not prevented American capitalists, with their Ku Klux Klan and other such organizations, from continuously using fascist methods of struggle

against working-class resistance.

France combines the low level of prewar workers' wages, established in the conditions of backward prewar technology, with the newest, technologically reconstructed large-scale industry. It possesses a surplus of uncommitted capital, disposes of a broad domestic market, receives reparations rather than paying them out, and has been further strengthened by the acquisition of Alsace-Lorraine. These factors explain the low level of French export prices prior to the world crisis and the country's comparative strength in resisting the world crisis once it did break out. Just how adequate the reserves of these two countries are will be demonstrated by the further development of the crisis, especially when it breaks out with full force in France itself.

As for England, its old-fashioned democracy continues to survive mainly by virtue of the support English capital receives from its investments in the colonies, Dominions, and other countries. The process of immobilizing part of the country's capital and labor power has advanced further in England than in any other country. Influenced by the world crisis, this process of immobilization is progressing at the present moment with enormous speed. No-one knows when or how the present crisis will end. Neither the Conservatives, the Liberals[35] nor the Labour Party has any clear program to overcome the impasse. The country's slide into lower and lower levels of production is occurring in a haphazard manner and encountering no organized resistance. Disillusionment with parliamentarism is gripping ever-widening circles of the bourgeoisie and is even spreading to some representatives of the Labour Party. Exceptionally indicative in this respect is the manifesto of a group of Labour deputies, who have formed a separate party headed by Mosley. Although the manifesto appears to be an odd mixture of protectionism, a "planned economy," and radical gestures aimed at American creditors, it nevertheless contains one very important point in which the "spirit of the time" shows through. This point consists of a suggestion to hand over economic dictatorship to five ministers, who would have the right to enact their measures without reference to parliament. Because we are not referring here to a dictatorship of the proletariat—and there is no such thing as a nonclass dictatorship—it follows that what is involved is a proposal to begin establishing a fascist type of bourgeois dictatorship. Although there are still many hard-headed people in England who do not like the word "dictatorship," conditions can change very quickly. The current state of affairs in England cannot be tolerated for long either by the bour-

geoisie or by the proletariat. Enormous and growing economic strikes might create a situation wherein England too, in one form or another, will follow the path of Germany in order to end up with the methods of Italy. Contemporary capitalism is living through an epoch of great and sudden surprises. Finally, the possibility can by no means be excluded that if the Conservatives receive an absolute majority in the forthcoming election campaign, while the country's economy slides further and further downhill, then this party might succeed in bringing about fascization of the relation between labor and capital while still observing all of the English traditions in matters of form; that is to say, there will be a fascist "long" parliament.

In conclusion, I would like to remind the reader of a very important passage by Marx that relates directly to our theme. In Volume III of *Capital* Marx wrote: "It is always the direct relationship of the owners of the conditions of production to the direct producers...which reveals the innermost secret, the hidden basis of the entire social structure, and with it the political form of the relation of sovereignty and dependence, in short, the corresponding specific form of the state." (*Capital*, III, p. 772).

Although it is true that here Marx is speaking of different economic formations and their corresponding form of state, with the appropriate reservations what he says applies also to the evolution of state forms within a given economic system, in this case within the bourgeois system. The introduction of fascist labor discipline brings with it a most essential change precisely in "the direct relationship of the owners of the conditions of production to the direct producers." This change is so profound that another form of bourgeois state is required in order to bring it about. Fascism is a threat precisely because it is too deeply rooted in the whole situation of decaying capitalism. From this perspective the downfall of Primo de Rivera and victory of the republic in Spain must not excite any illusions concerning the ease with which fascism might be liquidated. In Spain there was pseudo-fascism, not the fascism of a developed capitalist country. The dictator ruled on behalf of a clique of generals and did not smash the syndicates (he had an agreement with them, a kind of *modus vivendi*). There was no fascist power apparatus created in Spain nor any new organization for the use of force. That is why this regime collapsed so easily. With Italian fascism matters will be different.

PART SEVEN

12. The Capitalist System and Population Growth

Among bourgeois economists there is a widespread opinion that the present world crisis is connected with too rapid an increase of material production when compared to population growth. This position represents a fundamental distortion of the real state of affairs. Enormous and prolonged overproduction in contemporary capitalist society reflects a profound disproportion not between the rapid growth of production and a slower increase of population, but rather between the volume of material production and the limits of effective demand, or the dimensions of the market, which become steadily more narrow in conditions of capitalism's monopolistic degeneration. In reality, if one compares the dimensions of material production in the capitalist system with population growth, the comparison turns out to be most unfavorable.

Before the war the tempo of production increase significantly exceeded population growth, whereas now it hardly keeps pace and in some periods even falls behind. This fact is of exceptional significance for a general appraisal of the capitalist system at the present stage of its historical existence. It represents proof that the system is not only unable to maintain the tempos of economic development already achieved, but that this development is generally coming to a halt.

Let us look at the facts.

In order to characterize the position we shall take data for the growth of both production and population beginning with 1913.

In a memorandum published by the League of Nations (*Memorandum on Production and Trade, 1923–1928/9*, Geneva, 1930) we find an attempt to calculate by an aggregative method the movement of world production of materials and food. Among other data we find the

following table, which shows the development of production, in constant prices, first for 1926 and then for 1928.*

Total Production Values
(millions of dollars)

Year	According to 1926 prices	According to 1928 prices
1913	49,571.9	46,565.5
1923	52,671.4	49,044.3
1924	53,306.8	49,665.6
1925	57,661.8	53,806.5
1926	57,925.8	53,916.5
1927	60,531.1	55,871.5
1928	62,776.9	58,018.2

Source: League of Nations, Economic and Financial Section, *Memorandum on Production and Trade, 1923-1928/9* (Geneva, June 1930), p. 79.
Editor's note: Errors and omissions in Preobrazhensky's text have been corrected.—R.D.B.

This table includes only a part of the real world production because it does not provide data for the manufacturing industries, transportation, and so on. However, this circumstance makes no essential difference, for movement of the parts enables us more or less accurately to grasp the dynamic of the whole. And what is important for present purposes is not complete data on the absolute dimensions of all production, but rather data for the dynamic of its growth. In any event, instead of underestimating the speed by which world production grew, the table in the memorandum is more likely to exaggerate it because it allots too great a role to commodities that enjoyed the most rapid increase of production, with the consequence that the general tempo of growth must inevitably turn out to be in excess of the real one with respect to world production as a whole.

But even this table, which embellishes the real state of affairs, is completely devastating for the contemporary capitalist system.

Let us take the first decade, from 1913 to 1923. The world war occurred in this decade, with all of its burdensome consequences for the world economy and particularly for the economy of Europe. In this respect the decade might be considered exceptional. But to the extent that war is not a haphazard catastrophe—to the extent that it is a perfectly regular shake-up of the capitalist system, resulting from the

decay of capitalism in the monopolistic stage of its existence—to that extent the decade is not exceptional at all but is perfectly typical of the epoch of capitalism's decline. From an accidental catastrophe (if such had been the case) and the resulting economic decline, the capitalist system, taking into account all of its potential productive forces, should have recovered within 2 to 3 years. In reality it was not until 1925, thirteen years later, that Europe regained the prewar level of production. *Only senile organisms recover so slowly, organisms whose frequent and serious illnesses are not accidental.*

For this decade world production shows a growth from 49,572 million dollars, according to the preliminary calculation in the memorandum, to 52,671 million, or 6.2% in constant 1926 prices and 5.3% in constant 1928 prices.

And how did the world's population change during this time?

In absolute figures the change was as follows:

World Population
(in millions)

Year	Population
1913	1,789.3
1924	1,894.9
1928	1,962.0

Editor's note: The *Memorandum* used by Preobrazhensky did not include the 1913 figure that appears in his text. The figure used here comes from the *Memorandum* for the year 1925. All population data pertaining to this period are in fact rough approximations due to the impossibility of accurate measurement.—R.B.D.

At the present time the population of the globe is growing by somewhat less than one percent per year, including China, for which there are no reliable data—indeed, there are no such data for certain other, less important countries either—and at 1.2 percent per year if China is left out. The annual population growth from 1910 to 1928 was about one percent, and for this whole 18-year period population grew by 17%. From 1913 to 1924 population grew by 6%; that is to say, the increase was below the average because of the successful "liquidation" of the earth's redundant population during the world

war. These figures demonstrate that over the period in question growth of the world's material production *hardly kept pace* with population growth if we include the unreliable figures for China; and if we omit China in terms of both production and population, then in that case the growth of production even lagged behind the increase of a population which had been reduced by means of war. Finally, if we take Europe alone, the level of production *declined absolutely and significantly over the decade in question*, falling from 16,646 million dollars to 14,531 million. In Europe the developmental dynamic of both population and total production was perfectly catastrophic for capitalism and its material culture.

The years from 1923 to 1929—and therefore the total results from 1913 to 1929—were more favorable for capitalism. The memorandum we have cited from the League of Nations hastens to observe, with satisfaction (p. 9), that while the world's population grew by 10% from 1913 to 1928, production of means of consumption and materials grew in the same period by approximately 25% and world trade expanded by 22%. If the whole of production is judged by the level of production of material and food items, then this optimistic table means that mankind's position as a whole (abstracting from the predatory system of distribution) improved by one and one-half percent per year in per capita terms. And that is truly something to celebrate!

But it would be premature for the capitalists to boast even of these sparrow-sized successes. The point is that the years 1928 and 1929,* taken as the point of comparison with 1913, give a completely false impression of capitalism's successes because these years represented the crest of economic recovery. With equal justification we could take the crisis year 1930 for a comparison with 1913 and come to the conclusion that over this time population increased by 12% while production hardly changed at all.

Let us try to make a more scientific comparison. Insofar as the present world crisis is just as much a normal phenomenon for capitalism as the world war, it turns out that the second decade since 1913** is also one of enormous economic shocks because of the curtailment of production brought about by this crisis (which, by the way, might still grow into a new world war in the future). If we include both last year and this year, 1931, and if we begin by assuming that in 1931 the crisis will bring no less curtailment of production than occurred in 1930; if we furthermore measure the contraction for these two years by what

has taken place in such leading countries of the world ecoomy as the United States, Germany, and England, then it becomes possible for us to take the level of the world's material production to be approximately equal to that of 1913. Making that assumption, and taking the level of production in 1929 to be the same as in the previous year 1928, we get the following result. The average production for the whole period, translated into constant 1928 prices, equals 52,900. By comparison with 1913 this represents an increase of 12%. However, from 1913 to 1931 inclusive, population must have grown by 13%, with the consequence that there was not only no increase, but even a decline of production compared to population.

But even if we take the average from 1925 to 1929 on the one hand, and 1930 and 1931 on the other (taken at the level of production of 1923), we end up with a production increase of 15%; that is to say, *the growth of production turns out to be roughly the same as the growth of population.*

What do all of these devastating figures mean?

They mean that the capitalist system has brought to a halt any increase of material welfare for society as a whole, that the system has in fact suspended growth on the part of the productive forces insofar as growth is expressed by an increase of the real production of goods per head of the population. What all of this means is that in the years 1930 and 1931 human society, having increased in terms of population by 13%, has been thrown back to the living standard of 1913, or by almost twenty years. And we have yet to mention the fact that given the bourgeois system of distribution, and particularly the growth of unproductive consumption throughout the entire system, this absolute halt in growth of the productive forces, expressed primarily in an absolute suspension of any increase of per-capita production, means a systematic deterioration of living standards for the toiling masses—or in other words, for the overwhelming majority of the population.

This system is already incapable even of simply feeding human society. All that is missing now are attempts to rectify the situation by a world war!

Every indicator, including this material summary of the capitalist economy over 20 years, points to the inevitable and rapidly approaching crash of capitalism.

But it all depends upon the working class!

13. The General Crisis of Capitalism

In previous chapters we have devoted considerable space to analyzing the unique features of the economic cycle under imperialism, particularly those displayed in the economic crisis of 1930–1931.

The most important conclusion to which we have come is that the capitalist system, under monopolism, experiences an extraordinary weakening of the stimuli for expanded reproduction when compared to the epoch of free competition. Because of the change in the pattern of the cycle, the system has lost its most important mechanism for spontaneous recovery from a crisis. This circumstance causes the present crisis to become extremely protracted, severe, and unusually dangerous for the entire capitalist system. This crisis cannot come to an end in the usual manner: it cannot pass through a period of depression into one of expansion. In the first place the crisis itself will last longer than any of its predecessors, and secondly, speaking in general terms, there is no chance of the ensuing depression growing into an expansion.

The result of all this must be extreme intensification of the contradictions that were tearing apart bourgeois society with enormous force even before the present crisis, when that society was already in a state of decay and experiencing complete suspension of development on the part of the productive forces.

The first and most important contradiction of contemporary capitalism is the systematic growth of a redundant working population, occurring at the same time as an enormous growth of unused means of production. Being particularly characteristic of postwar capitalism, this process has become even more acute during the present crisis. As the program of the Comintern has already observed, what is involved is an increase not of conjunctural, but of structural or absolute unemployment, whereby workers are permanently driven out of the production process. Marx ingeniously foresaw the development of this contradiction of the capitalist system, anticipating a time when a redundant working population would grow up alongside increasingly redundant capital, or a time when the entire system, as such, would turn out to be a roadblock in the way of society's economic development. Marx's only failure was in not foreseeing the endurance shown by the proletariat of the leading capitalist countries once the general bankruptcy of the

capitalist system was revealed. On this theme Marx wrote the following: "The more productiveness develops, the more it finds itself at variance with the narrow basis on which the conditions of consumption rest. It is no contradiction at all on this self-contradictory basis that there should be an excess of capital simultaneously with a growing surplus of population. For while a combination of these two would, indeed, increase the mass of produced surplus value, it would at the same time intensify the contradictions between the conditions under which this surplus value is produced and those under which it is realized" (*Capital*, III, p. 240). Elsewhere in the same Volulme III of *Capital* Marx makes an observation which might have been specially written in anticipation of the present situation in capitalist society: "A development of productive forces which would diminish the absolute number of workers, i.e., enable the entire nation to accomplish its total production in a shorter time span, would cause a revolution, because it would put the bulk of the population out of the running" (*Capital*, III, p. 258).

Today capitalism is putting millions and millions of additional workers "out of the running" along with ever-growing masses of capital. But by the very same token capitalism itself must soon be put "out of the running." The fact that almost one-quarter of the entire world proletariat has turned out to be redundant from the viewpoint of capitalism demonstrates only that capitalism itself, long ago in the course of its historical development, became redundant and has outlived its allotted time.

A second contradiction of contemporary capitalism has also been rendered extremely acute by the crisis and its inevitable accompaniment in the form of reduced national income: the capitalists are required to spread the burden of the system's ever-increasing unproductive consumption—including the expenditures needed both to liquidate the consequences of the first world war and to make feverish preparations for the second—over a steadily narrowing basis of exploited workers. Having already thrown more than thirty million workers permanently out of the production process, the capitalists are therefore compelled to undertake systematic reduction of the living standard of those workers who are still at work. Resistance on the part of the working masses, who are interrupting the production process by striking, reduces the volume of production all the more and still further intensifies all the contradictions. Just how far these mass strike conflicts undermine the

capitalist system can be seen in the decline imposed upon the conjunctural graph of postwar England in 1926, the year of the great strike. Today England is very close to repetition of that strike, and clashes of similar magnitude are maturing in a number of other countries.

At an earlier point we have mentioned and explained why during the present crisis, as opposed to its predecessors, retail prices are not declining in conformity with wholesale prices. A decline of wholesale prices reduces the profits of the capitalists, frequently forcing them to operate the enterprises with no profit at all or even with a loss. The inevitable result is to provoke attempts to lower wages at a time when the cost of living either remains at its former level or lags substantially behind the wage reductions which the entrepreneurs are attempting to impose. Under free competition the wage reduction occurred after retail prices had already declined. But now a general attack upon wages has begun before the decline of retail prices, making the wage struggle exceptionally bitter.

Curtailment of production and falling agricultural prices, both for means of consumption and for industrial material, also intensify the agrarian crisis to the extreme. Having expanded its production when high prices prevailed for articles of food and material, and having relied mainly upon borrowed capital to make significant capital investments, agriculture, and particularly overseas agriculture, is now forced to reduce production and increase the immobilization of fixed capital already invested in this sphere. Small producers are unable to sell their production even for the prices they were receiving during the 90s of the last century; they are no longer able to recover their costs, to receive payment for their labor, or to purchase the industrial commodities they require. But at the same time they are obliged to cover their debts, which were incurred under a different price index and now hang about their necks like a noose. Small producers are being ruined in the countryside by the millions; moreover, in view of unprecedented industrial unemployment, they cannot find so much as a crust of bread in the cities, which previously represented a constant safety-valve for surplus rural population. Thus the general crisis of capitalism, made all the more severe by the cyclical crisis, is shaking up all social relations both in the cities and even in the more conservative and tranquil countryside. Because the dimensions of state budgets depend directly upon national income, which is being sharply reduced by the fall of production during

the crisis, we see growing elements of a financial crisis in every direction. The budgets of most countries show enormous deficits. Revenues are falling, while expenditures, especially on the unemployed are rising. A country such as England, at one time creditor to the entire world, is now soliciting a loan in France or the United States. By refusing to make payments on its state debt Australia declared financial bankruptcy.[36] Suffering from both the agrarian and the industrial crisis, while simultaneously building up their armaments, the small states are piling up larger and larger unpaid debts. Such is the case with the Balkan countries and Poland, which is pestering France for one loan after another. Today's bankrupts are zealously borrowing from tomorrow's bankrupts. The enormous burdens of all debtors, incurred during the war and in liquidating its effects, have increased in exactly the same measure as world prices have fallen. The burden of these obligations, which was too heavy to carry even in the years of economic recovery, is now becoming utterly unbearable.[37] *Titles to income of all types have been inflated without limit and are increasingly coming into contradiction with a declining total of real values being produced in a society where tens of millions of people have been forcibly thrown out of production and tens of millions of hectares of previously cultivated land will be left idle.* Just as a slight push by the barbarians caused the monstrous military-exploitative machine of the ancient Roman Empire to crumble on its shrunken and depleted economic base, so the exploitative pyramid of contemporary capitalism has matured for the same fate and awaits only a sufficiently forceful blow from the revolting proletarian masses.

In countries producing material and means of consumption, many of which are either colonies such as India, or dependent upon the powerful capitalist countries, such as the states of South America, the crisis is creating deep unrest. In the colonies the national movement is being reinforced; in the countries of South America there are endless "revolutions." The entire periphery of European and American capitalism is either in a state of profound ferment and struggle for emancipation, or else, like China, enduring endless civil war.

Even in Europe capitalism's position is extremely unstable and becoming increasingly strained. It is by no means coincidental that the royal power in Spain, having long ago become thoroughly rotten, retired at a time of world crisis without so much as a struggle. Nor is it coincidental that the manifestations of social struggle are becoming

more profound than ever before in South America, or that Communism is enjoying successes in China. The same applies to the most energetic preparations that are now under way, at the height of the crisis, for intervention against the USSR. Such an intervention will entail a grandiose eruption of the class struggle on a scale never before witnessed in history.

The whole atmosphere of Europe reeks with the smell of gunpowder and poison gases. Universal disenchantment with capitalism is spreading and becoming more pervasive even in nonproletarian circles, even among many who were once capitalism's apologists. The capitalists themselves have no idea of what awaits them tomorrow. The state of affairs is so unstable, especially in Germany, the weakest link of the capitalist chain, that the greatest events and the most serious shocks might occur at any moment. No-one will be surprised. Everyone is psychologically prepared.

14. The Capitalist System and the USSR

In the matter of intensifying capitalism's general crisis the Soviet Union plays a completely exceptional role. In this respect the bourgeois press is raising the greatest outcry over our dumping, whereas in reality quite the opposite is true and we threaten capitalism least of all through our foreign trade.

To begin with, the accusation of currency dumping on our part is completely illiterate from the standpoint of economic science. The basis of all currency dumping is a discrepancy between domestic prices in the exporting country and gold prices, both in the world market and within the importing countries. The basis of this discrepancy, in turn, is twofold: it includes on the one hand the sale of labor power below its cost of reproduction, and on the other hand, expenditure of a portion of the fixed and sometimes of the circulating capital, belonging to the country with the falling currency, without making provision for its replacement. In general it is preposterous to apply to our foreign trade the same criteria as would apply to an economy regulated by the law of value rather than by a conscious plan, including a plan of foreign trade.

It is equally absurd to evaluate our exports from the viewpoint of an "equilibrium price," for the law of value in general is ceasing to function in our economy. In our imports and exports we are guided by the task of completing an optimal plan of industrialization in the shortest possible time. It is true that our entire economy, and especially the motives for our exports, are completely new and unprecedented in economic history. But that novelty calls for study of its specific features, not for narrow-minded interpretation in terms of patterns derived from the sphere of capitalist relations.

When a country with a falling currency engages in dumping it experiences a systematic reduction of wages, whereas in our country, despite the temporary difficulties with food, wages on the whole are growing. A systematic increase of wages represents the most important concern of the Party and the state and the most essential component of all our economic plans. In a period of currency dumping all calculations are disorganized, and a portion of the country's fixed and circulating capital is consumed. With us, on the contrary, fixed and circulating capital are growing at tempos never before seen in the entire history of capitalist development.

But even more important is the fact that we are not exporting in order to accumulate gold or debt obligations owed to us by other countries; rather our purpose is to use all of the currency earned in order quickly to purchase equipment and the material most vital for the factories we are building. As distinct from other countries, we have not curtailed our imports even in a period of world economic crisis. Measured over a number of years our foreign trade does not show an active balance, but an equilibrium between exports and imports, sometimes even a surplus of imports over exports. Tsarist Russia, on the other hand, covered its foreign indebtedness with an enormously active trade balance, founded upon starvation. We are free of that indebtedness, apart from very modest long-term credits for the equipment we have ordered. From this perspective it would appear there is nothing to warrant capitalist complaints.

The accusation that we are selling material more cheaply than other exporting countries, even if true, is absurd from the capitalist viewpoint; the entire economic policy of industrial countries in the area of foreign trade was built upon encouraging cheap imports of material. If we export cheap material, individual groups of capitalists who are exporting the same material might suffer, but the entire capitalist class

can only profit. That is all the more true because sometimes through our own fault—and here the comrades responsible for our imports should be ashamed—and sometimes because of other difficulties that our trade encounters, we are thus far losing more from falling export prices than we gain from falling import prices. Here too the capitalists have nothing to complain about—no one is stopping them from buying lower-quality material at a higher price from our competitors.

Our press has also dealt with the foolish accusation that we might overthrow capitalism by means of cheap prices when the lever at our disposal is a mere 3% of world trade. For our own part, we evaluate capitalism's staying power more highly than that.

Even if it were to happen that in completing the five-year plan we found ourselves able to export not simply material, but also manufactures, including mechanical equipment, at lower prices, we would still not be exporting for the sake of accumulating gold. In his own day Lenin wrote a famous article on this theme and spoke quite expressively of the possible uses of gold under socialism.* Should we export a great deal, it would mean we would also import a great deal. The structure of our exports will obviously change by comparison with the present position, and the change will of course be in the direction of increasing our exports of finished articles. By that time the urgency now attaching to our exports will no longer exist. Although our volume of trade will be greater, our dependence upon the foreign market will be less. We will increase our export of commodities having a secondary rather than a primary importance (indicating a high level of welfare for the masses and growth of their consumption). But whatever the case, what we have just said will remain in force: we will export in order to import.

It is true that when we so thoroughly rationalize our production as to produce much more cheaply than the capitalist countries, in terms of our expenditure of labor, then *we will exchange a smaller quantity of labor in our trade for a greater quantity of labor*. But in the first place this will not happen in a year; and in the second place, this development will more than fulfill the aspirations of those now raising an outcry over our currency dumping. Currency dumping implies just the opposite relationship: the importing country, with the hard currency, acquires a greater quantity of labor. Such a balance in the exchange of labor will be the most tangible and obvious proof of the superiority of a socialist over a capitalist economy.

The whole essence of the matter lies in this question of superiority.

The capitalists are uneasy today not because of our future superiority over them in foreign trade, but because of the real superiority characterizing the tempos of our economic growth, a superiority that already exists and is emphasized by all the columns of figures. At first the bourgeois newspapers exclaimed that all our statistical data represented an all-round swindle. When they could no longer swindle their own readers in this manner, they perfected their lies and began to shout that we calculate our budget and our production in inflated rubles whereas in reality we are experiencing a systematic production decline. Eventually this argument also ceased to work. We give calculations of our production either in direct, natural measures, or else in constant 1926 prices, and these figures began to appear in all surveys of the world conjuncture, even in the most solid bourgeois publications. At that point the whole system of argumentation against the Soviet Union was taken under review. Recently in the pages of one White Guard newspaper there was a quite open discussion of the question of what to say of the Soviet Union: whether it is better to say that the five-year plan will end with a crash, or alternatively, that it will be fulfilled without fail and that capitalism is threatened by precisely that fact. Just now the most solid bourgeois organs, both of liberal and hard-headed leanings, such as the English *Times*, have reoriented their arguments in this latter direction. Now they are developing the "class consciousness" of the bourgeoisie primarily by indicating that our successes are a fact and that the capitalist system is confronted by a mortal danger from this very quarter.

As a result of this change in methods of struggling with the Soviet Union, our official data on the state of our economy have begun to appear frequently in all the surveys and are even becoming an object for comparative study of the conjuncture in other countries. The memorandum of the League of Nations concerning production and trade, which we have already mentioned earlier, is rather interesting in this respect.

Certain sections of this publication by the League of Nations are an excellent propaganda document for Communism. Together with other interesting data we find an extremely interesting table [see p. 195], giving a comparative index for the growth of industrial production in different countries, beginning in 1925 and running through to 1929 inclusively. One of the countries included in the list is our Soviet Union. The table refers to the very period when the capitalist economy was experiencing expansion in some of its parts and recovery in others.

Indexes of Industrial Production in Various Countries
(1925 = 100)

Country	1926	1927	1928	1929
America:				
Canada	117	125	138	154
United States	104	102	107	113
Europe:				
France	117	102	118	130
Germany	95	120	120	122
Poland	98	122	138	138
Sweden	103	108	104	127
Switzerland	95	112	117	111
United Kingdom[1]	—	107	106	112
USSR[2]	141	172	208	140[3]

Source: League of Nations, Economic and Financial Section, *Memorandum on Production and Trade, 1923–1928/29* (Geneva, June 1930), p.36.
[1]Board of Trade Index based on 1924 = 100.
[2]Year ending September 30.
[3]October 1928 to August 1929.

In this respect the table is very optimistic for capitalism. Nevertheless, the tempos of our development stand out as being completely exceptional and without precedent. We include the table here, as the best propaganda for Communism that one might imagine.

This remarkable table has one shortcoming, and that is that it does not give the figures for 1930, which are more pessimistic for capitalism. The figure for the United States in December 1930 is 82, taking the level of 1923–1925 as 100. All the other countries show an equally abrupt decline: for example, England shows 98.7 for the whole of 1930, taking the level of 1924 as 100, while the fourth quarter of 1930 gives a figure of 93. The enormous successes achieved by our industry during 1930, on the other hand, raise our figure in this table from 240 to more than 300. All of these data scarcely require any commentary.

The propaganda significance of our economic successes is beyond measure. In an epoch of the most severe crisis of capitalism, both in cyclical and in general terms, these figures proclaim the future of every country that will carry out the socialist revolution and emancipate the productive forces from their capitalist integument. All the objective

preconditions for the liquidation of capitalism and a socialist reconstruction of society are at hand, especially in Europe. The entire matter depends solely upon the working class. The average worker is held back from revolution by the inertia of the past; by uncertainty concerning the day after the revolution, arising from the dependence of every capitalist country upon the world market; and partly by fear of a leap into the unknown—"Will things not become even worse, will we be able to manage the economy on our own?" Thus far all of the Social Democratic parties have played mainly upon this psychology of the average worker. While the bourgeoisie and the social fascists are concerned to liquidate the former standard of living, through our successes we are destroying these psychological barriers to revolution. Our experience brilliantly demonstrates the superiority of a socialist organization of the economy. Here there will be no leap into an unknown future. On the contrary, it is the very continuation of the capitalist system's existence which promises an unknown future, for no one is in a position to predict what horrors might be inflicted upon the toiling masses by a dying social structure. Every country in which the working class triumphs is guaranteed an economic and military alliance with the USSR together with imports of the necessary material and food items. Increased production of such items is guaranteed in any case, to whatever extent is required, by the joint efforts of the socialist countries. Let the other countries impose a blockade around a new socialist country: in today's circumstances it will not perish, for it will have a powerful ally and socialist rear in the East.

Whatever happens, in its struggle for power the working class of Europe is risking far less than our own workers did in the October days of 1917.

Notes

1. In Volume 3 of Marx's *Capital*, there is a place where he speaks of the situation in which society might find itself due to the growth of absolute unemployment. Speaking of the worker's displacement by the machine, he wrote that if the majority of the population found itself out of the running it would have to make a revolution.

At the present time it is not only a growing portion of the population that finds itself out of the running (at the close of 1930 there were more than 30 million unemployed in the world economy), but also a growing portion of the means of production. This situation will continue until the capitalist system itself is out of the running. [See *Capital*, III, p. 258—R.B.D.]

2. The data for last year are from *Wirtschaft und Statistik*, No. 20, 1930, pp. 812-13.

3. The issues of new capital in England during 1929 came to £285,239,000, of which £4,485,000, or 1.57% of the total, went to the basic branches of the English economy—coal, iron, and the machine-building industry. This figure is only slightly higher than what went into the category of hotels and theatres, which received £4,011,000. Various state loans accounted for £107,000,000, going mainly to nonproductive purposes. Of £267,000,000 in 1930, loans again accounted for £190,000,000, while iron, steel, coal and machine building received £1,285,000, or a total of 0.48%, less than one-half of one percent. (See *The Statist* of February, 1931, p. 47, and also *The Economist* for the same period.)

4. Here we are taking a further step in the direction of increasing the amortization of large "C," starting with an initial increase of the figure for fixed capital. For the moment this is not important.

5. The reader will be able to understand the significance of this circumstance by comparing it to our own reconstruction period, a time when idle fixed capital was assimilated and the increase of accumulation went primarily into expansion of circulating capital, enabling production to increase rapidly with a relatively modest accumulation.

6. In my articles entitled "The Change in the Value of Gold and Commodity Prices" I showed in detail that depressions and expansions in the gold industry occur in periods of time which are the reverse of crises and expansions in the remaining branches of the economy. (*Problemy ekonomiki*, Nos. 1 and 2, 1930).

7. Lenin, *Selected Works*, I, p. 731.

8. Lenin, *Selected Works*, I, p. 781.

9. On this matter, as on certain others, I do not completely agree with Comrade Spektator (see the revised edition of *Osnovnye problemy mirovogo khoziaistva*, p. 172 and elsewhere) because he associates the accumulation of redundant fixed capital exclusively with the war. In my own book on postwar monopoly capitalism I shall have to give an account of several questions. However, I consider it my duty to acknowledge the very important service of Comrade Spektator, insofar as he is one of a small number of economists who underlined the exceptionally important role of the reproduction of fixed capital, both for the theory of reproduction and for the theory of crises.

His problem lies in his impatience with theoretical analysis, as a result of which he remains primarily an empiricist even in the formulation of purely theoretical problems. [For Spektator's contribution to Soviet debates of the 1920s see Day, *The 'Crisis' and the 'Crash'*—R.B.D.]

10. This is a good example with which to demonstrate that form is not something external to the essence of a phenomenon; more specifically, that the productive forces can be viewed as the content, and the relations of production as the form, only if the form is understood to be organically connected with the content.

11. One must bear in mind, however, that the wage increase which did occur for hired workers took place by comparison with the epoch of early capitalism, when exploitation of the proletarianized small producers reached monstrous limits. By comparison with the earnings of a mediaeval artisan capitalism brought no improvement, not even in the epoch when mechanical production flourished. This fact can be seen in the data of the classic work by Avenel, *Histoire Économique de la Propriété* (Paris, 1913).

12. See my article in *Vestnik Kommunisticheskoi Akademii*, No. 18, 1930.

13. *Vestnik Kommunisticheskoi Akademii*, No. 17.

14. The reader will find many correct observations on this theme in the works of Comrade Spektator on the theory of the world economy, although here too the author is more concerned with a study of the concrete world economy over recent decades than with theory, in the proper sense of the word.

15. I do not deal here with the question of how productive, for example, is the labor of a sales clerk.

16. The enormous tax that is levied upon the consumer by the trade network ends up only partly in the hands of the wholesale trade monopolists. A much larger portion of society's expenditure on the retail trade network is due to the enormous number of small trading firms, which chase after customers and which, were they working to capacity, would be able to handle a turnover three times larger. Having a less than adequate turnover, these enterprises are compelled to add on a large margin in order to pay high taxes, meet the rent for their premises, and provide some kind of income for their owners. Parasitic petty trade is especially significant in large European cities, particularly in London and Paris.

17. This limitation of consumption on the part of the masses is not merely predetermined by the structure of capitalism, but is also connected with the balance of forces between the proletariat and the class of capitalists. And on this central issue a strictly economic analysis of the problem is completely inadequate.

18. Here we must repeat that a very important source of unproductive consumption is inclusion in the calculation of the average profit of the income going to the nonoperating, backward enterprises, which are members of a trust and receive a unique form of trust rent, or a pension, whose parasitic character is especially obvious.

19. By this abbreviated term we mean the value of the annual wear of fixed capital, a value which enters into the gross product and forms part of the constant capital.

20. Here is what Marx wrote concerning the turnover of fixed capital and the causes of periodic crises: "the cycle of interconnected turnovers embracing a number of years, in which capital is held fast by its fixed constituent part, furnishes a material basis for the periodic crises. During this cycle business undergoes successive periods of depression, medium activity, precipitancy, crisis. True, periods in which capital is invested differ greatly and far from coincide in time. But a crisis always forms the starting point of large new investments. Therefore, from the point of view of society as a whole, more or less, a new material basis for the next turnover cycle." [See Marx, *Capital*, II, p. 186—R.B.D.]

21. [There are two footnotes on this page citing two different editions of Volume 2

of *Capital*, which were not available to the editor—a German edition of 1893 and a Russian edition of 1929. The corresponding numbers are missing from the text. The notes appear to refer to Marx's description of how fixed capital is transformed into money capital, and how this money capital is again converted into fixed capital, the timing of the reinvestment depending upon the physical durability of the fixed capital in question. See Marx, *Capital*, II, pp. 183–5.—R.B.D.]

22. I note in passing all of the protests by R. Luxemburg, Fritz Sternberg, and others concerning the impossibility of transferring redundant capital from Department II into Department I. This capital, having the natural form of means of consumption, is perfectly mobile and is needed in precisely this form in order to expand variable capital in Department I. The protesters do not understand that it is not a question of moving looms from textile factories into either brickworks or the metallurgical divisions of heavy industry. What is involved, first of all, is a transfer of titles to income, and second, such a transfer of additional means of consumption into Department I as will permit this Department to expand its variable capital, without the expansion of constant capital in II, which would be required in other circumstances.

23. The increase of socially necessary labor time arises from the use of less skilled labor power.

24. Marx, who closely observed the course of all the capitalist crises in his day, wrote the following concerning the renewal of fixed capital at the time of a crisis: "competition compels the replacement of the old instruments of labor by new ones before the expiration of their natural life, especially when decisive changes occur. Such premature renewals of factory equipment on a rather large social scale are mainly enforced by catastrophes or crises." (*Capital*, II, p. 170)

25. If one looks for contradictions in Marx with the same skill as his critics generally demonstrate, then not only will the reproduction schemes of Volume 2 turn out to contradict the above-mentioned section of Volume 3, but they must also contradict other parts of Volume 2 itself, above all the previously cited passage concerning the causes of periodic crises. This "contradiction" exists for people who do not study *Capital* and its problems, but only "glance through" it, or else learn like Wagners from Faust [Wagner was Faust's servant in Goethe's *Faust*.—R.B.D.] It results from the fact that the schemes in Volume 2 assume the wearing out and reproduction of fixed capital in a single year, so that it also increases smoothly in proportion to the overall tempos of accumulation. All of this harmonious development of production disappears once the simplifying assumption—that the entire fixed capital wears out annually—is replaced by another assumption, corresponding to reality; namely, the assumption that fixed capital is reproduced and expanded unevenly, that the conditions of its reproduction are different from the reproduction of the circulating component of constant capital, and that the immediate causes of general crises and the fundamental causes of their periodicity lie in this unevenness. Marx was aware of all of this. The fact that he did not construct schemes, taking these complicating conditions into account, is to be explained by the same general cause which prevented him from completing his great work. But this incompleteness represents an appeal to the intellect of subsequent generations of economists and not to their stupidity, with the obvious exception of those who are stupid for reasons having to do with social class. The least acceptable of all types of criticism is that which counterposes one stage of an investigation to another, instead of showing that an author embraces opposing sets of views between which real contradictions exist. It appears that critics of this sort make such a comparison because they are aware of what is involved in both respects. In fact the reason why they find a contradiction between the beginning and the end is that they do not understand the whole work, and therefore understand neither the beginning nor the end.

26. Here the following observation must be made. The renewal of fixed capital, in

conditions of rapid technological progress, inevitably involves an overall increase of the mass of fixed capital due to the general rise of capital's organic composition. This must be distinguished from a simple increase of fixed capital with the former technical quality. In the present case what is involved is the *renewal* of fixed capital, with the temporary exception of the enterprises that manufacture fixed capital.

27. Fritz Sternberg attempts to rescue at least part of Rosa Luxemburg's position by reference to the fact that with a rise of the organic composition of capital in both departments the second department must accumulate more quickly (in the natural form of means of consumption), with the result that this accumulation must serve as a chronic cause of a crisis of overproduction. My present exposition is a reply to all of Sternberg's errors (see his report and concluding remarks to the Communist Academy, published separately as a book, *Imperializm i krizisy*). In the present context I wish to observe only that if this cause of disproportion, to which he and I both refer, is not liquidated by a transfer of capital from Department II into Department I, then it is entirely possible, as I have shown, that this disproportion will be lost in the more severe, cyclically reproduced disproportion, which lies at the basis of the most typical general crises of capitalist society, the latter being caused by the specific conditions of reproducing and expanding the system's fixed capital.

28. After the present book was already written I became familiar with a recent book by Ferdinand Fried, *Das Ende des Kapitalismus* (Jena, 1931). Among other things, this book contains the following interesting comment: "The crisis of 1900–1901 is properly seen as the last great world crisis to occur in normal capitalist conditions and thus provides the final and the best opportunity for making comparisons with postwar crises" (p. 157). Unfortunately, the author gives only a superficial survey of the external manifestations of crises in the Germany economy; and his work generally leaves out a systematic analysis of crises under imperialism, as distinct from crises of classical capitalism. For the most part he advocates a reduction of links with the world economy and orientation upon a regional, self-contained economy. Thus the regressive disintegration of the world economy is already finding its theorists and is being elevated to a principle of economic policy.

29. *Record Book of Business Statistics*, part II, Metals and Machinery, p. 31.

30. This whole picture can be followed most graphically in the tables of labor power employed in different branches, which are provided in *The Annalist*, No. 16, 1931, p. 94.

31. With respect to France it is still more proper to speak of an acute depression than of a genuine crisis, which still lies ahead.

32. It is interesting to notice that during a time of inflation, when a further increase of prices is expected, *consumers purchase even such commodities as they do not presently require*. They purchase large quantities, in excess of current needs, and thus partly protect their money against a loss of its worth. At a time of crisis, with a stable currency, the opposite process occurs: *consumers do not even purchase the commodities they need*, limiting themselves to minimal purchases of the bare essentials *in expectation of a further decline of prices*. Thus, when the turning point comes and prices rise, consumer purchases must increase sharply, for everyone will try to avoid missing the opportunity to make purchases when prices are at their lowest level.

33. These lines were already written when the financial and monetary crisis broke out in England, passing over into a political crisis. The attack on unemployment assistance by the "national government" of MacDonald, and the reinforced attack upon workers' wages, make a repetition of 1926 very likely, only this time perhaps an "improved" version.

34. *Wirtschaft und Statistik*, February 1930. More recent data are to be found in the just published record of the conference of bankers in Basle. See *Raport du comité, constitué sur recommandation de la conférence de Londres* (Basle, 1931), pp. 5–6 and also the tables in the appendix.

35. The Liberals came forward with an interesting electoral platform under the heading "How to Tame Unemployment," or a program for partially resolving the problem of unemployment. But the platform provides no general solution whatever within a capitalist framework for the economic problem of England. I shall make an effort to return to this Liberal program, the manifesto of Mosley's group, the protectionist plans of the Conservatives, and the general lack of any plans on the part of the Labour Party, in that part of my book which will be devoted to a concrete description of world capitalism following the world war.

36. All of this was written before the acute intensification of the financial and credit crisis in July 1931. Now many new and more significant facts have been added to what I said.

37. The bourgeois economists also understand this side of the matter very well, Keynes being an example. See his article in *The Nation* and also the two-volume work, *A Treatise on Money* (London, 1931).

Editor's Notes

P. 7. Karl Kautsky. Although in his early writings Kautsky spoke of capitalism's chronic shortage of markets, in later years he became an apologist of the capitalist system. Expecting a new stage of "ultra-imperialism," or capitalist organization on an international scale, he became increasingly reconciled with the *status quo*. The most thorough account (in English) of Kautsky's life and work is M. Salvadori, *Karl Kautsky and the Socialist Revolution, 1880–1938* (London: NLB, 1979).

P. 23. In the original text the figure given for large "C" in Department I is 10,000 with 5,000 in Department II. The correct figures are 20,000 and 10,000 respectively. Ten percent amortization occurs, and the corresponding figures in the scheme are 2,000 cI and 1,000 cII. 2,000 cI is ten percent of 20,000; 1,000 cII is ten percent of 10,000. The error occurs on page 19 of the text and is repeated on page 20.

P. 24. In this example Preobrazhensky leaves the situation in I unchanged: 6,666c + 2,222v + 1,111s fund of capitalist consumption, indicating a norm of accumulation in I of 44% (889/2000 = .44). In Department II he suggests changing the organic composition of capital and beginning with 3,000c + 1,500v + 1,500s. With the same norm of accumulation in II, accumulation becomes 660 (1500 × .44 = 660). Redistributing the 660 gives 3,440c + 1,720v + 840 capitalist consumption at the beginning of the year. In the original text there is a typographical error on pp. 20–21, where the figure mentioned for constant capital in II is 3,420.

P. 31. The original text (page 26) uses the figure 3,560 rather than 3,500. This appears to be a typographical error. The type of scheme Preobrazhensky might have in mind is the following. The original year was

6,000c (4,000 + 2,000) + 2,000v + 1,000s + 1,000s
3,000c (2,000 + 1,000) + 1,000v + 500s + 500s

Assume now that both departments draw upon fixed-capital reserves by using their existing fixed capital more intensively. Assume also that the system possesses substantial reserves of circulating capital. In these circumstances Department I will invest the entire accumulation fund of 1,000s in new variable capital, and Department II will do likewise with its 500s. The scheme for the first year of expanded reproduction in fulfillment of the order for a 10% increase of fixed-capital stock (large "C") becomes the following

9,000c (6,000 + 3,000) + 3,000v + 3,000s
4,500c (3,000 + 1,500) + 1,500v + 1,500s

Of the 3,000s in Department I let 1,500 be consumed. Thus 3,000v and 1,500s in I exchange for 4,500c from II. Of the remaining 1,500s in I, let 1,000 be set aside as an addition to large 'C," leaving 500. Adding these 500 once again to variable capital the scheme becomes

10,500c (7,000 + 3,500) + 3,500v + 3,500s
5,250c (3,500 + 1,750) + 1,750v + 1,750s

Of the 3,500s created in Department I, 1,750 are consumed and exchanged, along with 3,500v, for 5,250c from II. A further 1,000s are added to large "C" in Department I,

leaving a balance of 750. Whereas in the original year the fixed capital newly created and available for addition to the capital stock was only 333 (one-third of I's accumulation fund), this scheme shows that by drawing upon reserves of fixed capital the addition to large "C" in Department I can easily grow to 2,000 within two years. A more elaborate discussion of this type of process occurs in chapters VI and VII, where Preobrazhensky introduces more limiting assumptions in order to distinguish the business cycle of competitive capitalism from that operating under monopolistic capitalism.

P. 31. The fact that the text (page 26) here refers to 2,000 (i.e., two million denoted in thousands) as the 10% increase of "C" in Department I confirms the revision referred to above in the note to p. 23.

P. 34. The reader will notice that Preobrazhensky treats not only the suppliers of fixed capital as monopolistic competitors, but also the purchasers.

P. 47. The original text (page 40) reads: ". . . beginning with an assumption of pure capitalism in the stage of monopolism." This is clearly an error, the intention being to say ". . . in the stage of free competition."

P. 74. The original text (page 64) reads: ". . . elements of the constant portion of circulating capital." This is a typographical error in which "constant" and "circulating" have been reversed.

P. 77. There is a typographical error in the text (page 66) giving this figure as 10,000.

P. 78. There is an error in the text (page 67) giving this figure as 46.

P. 80. Large "C" would have to rise from 10,000 to 15,000 in order that 10% amortization would yield 1,500 value units corresponding to the 1,500v needed to create 1,500 units of new value.

P. 80. There is a typographical error in the text (page 68) so that it reads: ". . . to raise the circulating portion of fixed capital."

P. 80. There is a typographical error in the text (page 68), which reads *"predpriiatie"* (enterprise) rather than *"prepiatstvie"* (obstacle).

P. 88. There is an error in the text (page 75), where the figures for Department II are given as 1,998.5c + 497v + 497s = 2992.5. With a constant organic composition of capital v must be 1,998.5 divided by 4, or 499.625 (500 rounding off).

P. 91. There is an error in the text (page 78) reading: ". . . the prices for all of its elements of production have not risen. . . ."

P. 99. There is an error in the text (page 87) giving this figure as 6,000. As Preobrazhensky explains later (page 88 original, page 136 above) he intends reserves to be 35% of large "C." Thus the 6,000 has been changed to 7,000 (.35 × 20,000 = 7,000).

P. 103. Although Preobrazhensky earlier spoke of a "loan" of 500, in that context he was referring to the matter of fulfilling the order for 1500 in material terms. In terms

of value, however, the total "loan" from fixed capital must in fact be 750. This is so because 1500 material units have been added to large "C" in Department I, while only 750 value units were available (I's accumulation fund). Of the missing 750, 500 came from II, when it purchased only 1,750 while selling 2,250 worth of consumer commodities. The remaining 250 must therefore have come from within I. Thus in II there now exists money capital to the sum of 500, while in I there is also an unspent amortization fund of 250. If production continues into a second year on the identical scale, the 750 in I's accumulation fund will repay these "loans." II will sell 2,250 of consumer commodities while buying 2,750, and I will expend 2,500 fixed-capital values while replacing 2,750. The total addition to fixed-capital values in I will now be 1,000. If production continues for another year, a further 750 will be added, giving 1,750.

P. 107. There are errors in the text (page 93) which reads as follows: ". . . in the first year by 600 in Department I and 150 in Department II; in the second year by 650 in Department I and 162.5 in II, etc." The reproduction scheme to which Preobrazhensky is referring is the following.

6,000c (2,000 + 4,000) + 1,200v + 600s + 600s
1,800c (600 + 1,200) + 360v + 360s

In the second year Department I reinvests 600s, 500 in c and 100 in v. Department II makes its investments accordingly, giving the following scheme.

6,500c (2166.6 + 4333.3) + 1300v + 650s + 650s
1,950c (650 + 1,300) + 390v + 390s

In the third year Department I invests 650s, of which 108.33 go to variable capital and 541.66 to constant capital. The new scheme is

7,041.66c (2347.22 + 4694.44) + 1,408.33v + 1,408.33s
2,112.49c (704.16 + 1,408.33) + 422.50v + 422.50s

P. 115. *Krokodil.* The reference is to a popular satirical journal.

P. 137. There is a typographical error in the text (page 117) referring to 1932 rather than 1922.

P. 147. Eugen Varga. For Varga's view of the monetary and credit crises see Day, *The "Crisis' and the 'Crash,"* esp. ch. 8.

P. 183. There is a typographical error in the text (page 153) referring to 1916 and 1918 rather than 1926 and 1928.

P. 185. There is a typographical error in the text (page 155) referring to 1918 and 1919 rather than 1928 and 1929.

P. 185. There is a typographical error in the text (page 155) referring to 1931 rather than 1913.

P. 192. Lenin had suggested using gold "for the purpose of building public lavatories in the streets of some of the largest cities of the world." (*Selected Works*, III, p. 702).

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EVGENY A. PREOBRAZHENSKY (1886–1937), theorist and economist, was one of the foremost early Bolshevik leaders. Among his best-known works are *The ABC of Communism* (1919), which he wrote with Nikolai Bukharin, *The Economics of the Transition Period* (1920), *From NEP to Socialism* (1922), *The New Economics* (1926), and *The Theory of Depreciating Currency* (1930). *The Decline of Capitalism* (1931) was his last published work.

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